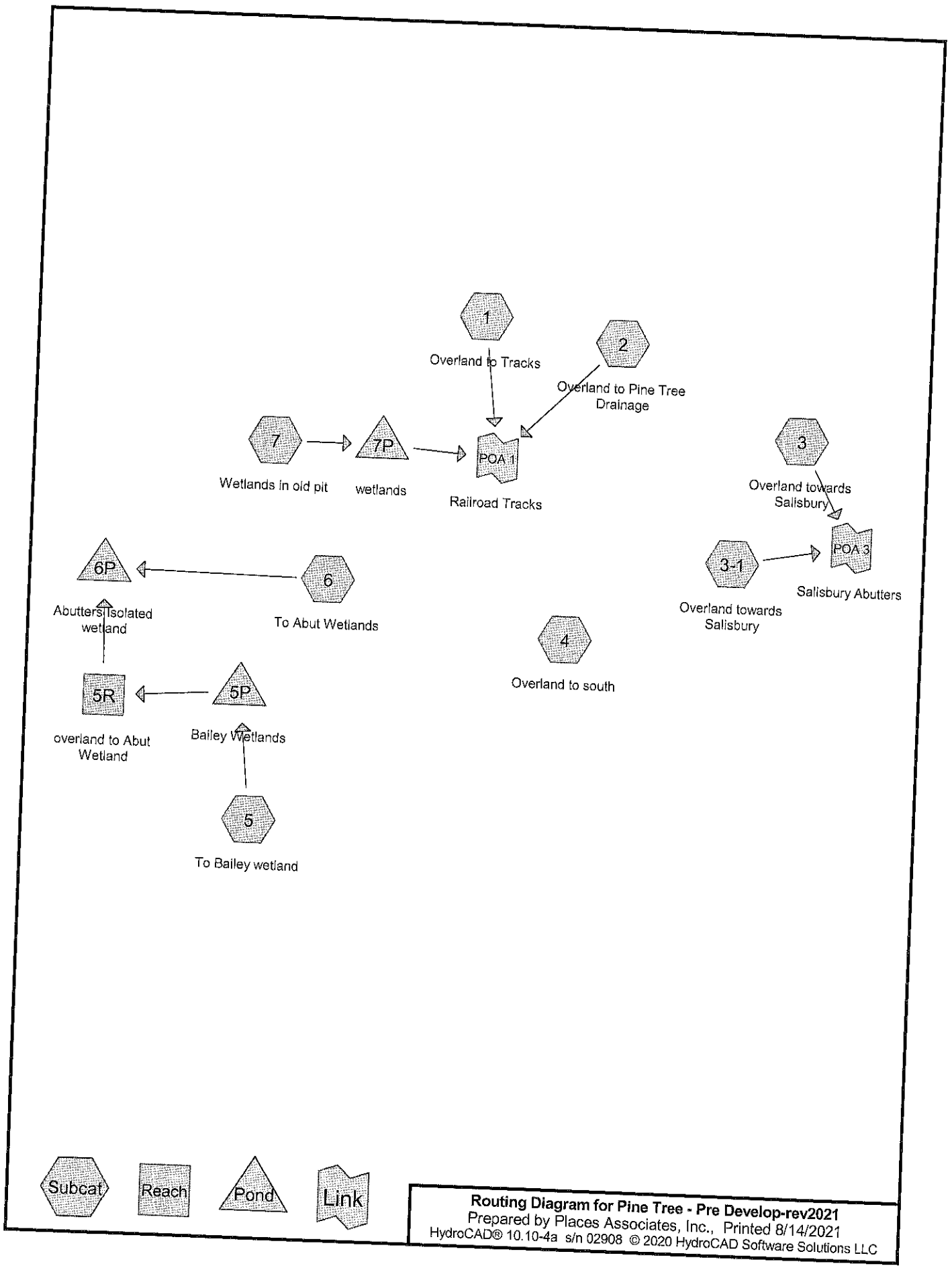
HydroCAD Data Output

Pre-Development



Routing Diagram for Pine Tree - Pre Develop-rev2021
Prepared by Places Associates, Inc., Printed 8/14/2021
HydroCAD® 10.10-4a s/n 02908 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
38,523	39	>75% Grass cover, Good, HSG A (1, 2, 5)
10,000	61	>75% Grass cover, Good, HSG B (5)
5,227	98	Paved parking, HSG A (2)
10,404	98	Unconnected roofs, HSG A (1, 2, 5)
2,075	98	Unconnected roofs, HSG B (5)
17,584	73	Wetlands, Brush, Good, HSG D (7)
777	77	Wetlands, Woods, Good, HSG D (5)
470,321	30	Woods, Good, HSG A (1, 2, 4, 5, 7)
104,296	55	Woods, Good, HSG B (5, 6, 7)
574,676	70	Woods, Good, HSG C (1, 2, 3, 3-1, 4, 5, 6, 7)
1,233,883	**53**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
524,475	HSG A	1, 2, 4, 5, 7
116,371	HSG B	5, 6, 7
574,676	HSG C	1, 2, 3, 3-1, 4, 5, 6, 7
18,361	HSG D	5, 7
0	Other	
1,233,883		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
38,523	10,000	0	0	0	48,523	>75% Grass cover, Good
5,227	0	0	0	0	5,227	Paved parking
10,404	2,075	0	0	0	12,479	Unconnected roofs
0	0	0	17,584	0	17,584	Wetlands, Brush, Good
0	0	0	777	0	777	Wetlands, Woods, Good
470,321	104,296	574,676	0	0	1,149,293	Woods, Good
524,475	**116,371**	**574,676**	**18,361**	**0**	**1,233,883**	**TOTAL AREA**

25-YEAR Pre-Development - Detailed Printout

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Overland to Tracks Runoff Area=340,499 sf 0.61% Impervious Runoff Depth=0.72"
Flow Length=654' Tc=14.0 min CN=44 Runoff=2.26 cfs 20,388 cf

Subcatchment 2: Overland to Pine Tree Runoff Area=77,540 sf 8.64% Impervious Runoff Depth=2.32"
Flow Length=526' Tc=12.5 min CN=65 Runoff=3.65 cfs 14,959 cf

Subcatchment 3: Overland towards Runoff Area=119,920 sf 0.00% Impervious Runoff Depth=2.77"
Flow Length=476' Tc=16.0 min CN=70 Runoff=6.08 cfs 27,637 cf

Subcatchment 3-1: Overland towards Runoff Area=65,886 sf 0.00% Impervious Runoff Depth=2.77"
Flow Length=480' Tc=16.3 min CN=70 Runoff=3.30 cfs 15,184 cf

Subcatchment 4: Overland to south Runoff Area=72,120 sf 0.00% Impervious Runoff Depth=2.58"
Flow Length=350' Tc=16.9 min CN=68 Runoff=3.30 cfs 15,521 cf

Subcatchment 5: To Bailey wetland Runoff Area=378,413 sf 2.36% Impervious Runoff Depth=1.05"
Flow Length=730' Tc=28.3 min UI Adjusted CN=49 Runoff=3.83 cfs 33,054 cf

Subcatchment 6: To Abut Wetlands Runoff Area=35,985 sf 0.00% Impervious Runoff Depth=2.40"
Flow Length=609' Tc=19.8 min CN=66 Runoff=1.39 cfs 7,207 cf

Subcatchment 7: Wetlands in old pit Runoff Area=143,520 sf 0.00% Impervious Runoff Depth=0.60"
Flow Length=670' Tc=18.0 min CN=42 Runoff=0.55 cfs 7,152 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.00 cfs 0 cf

Pond 5P: Bailey Wetlands Peak Elev=777.35' Storage=4,529 cf Inflow=3.83 cfs 33,054 cf
Discarded=1.96 cfs 33,054 cf Primary=0.00 cfs 0 cf Outflow=1.96 cfs 33,054 cf

Pond 6P: Abutters Isolated wetland Inflow=1.39 cfs 7,207 cf
Primary=1.39 cfs 7,207 cf

Pond 7P: wetlands Peak Elev=751.60' Storage=7,152 cf Inflow=0.55 cfs 7,152 cf
Outflow=0.00 cfs 0 cf

Link POA 1: Railroad Tracks Inflow=5.57 cfs 35,347 cf
Primary=5.57 cfs 35,347 cf

Link POA 3: Salisbury Abutters Inflow=9.39 cfs 42,822 cf
Primary=9.39 cfs 42,822 cf

Total Runoff Area = 1,233,883 sf Runoff Volume = 141,101 cf Average Runoff Depth = 1.37"
98.57% Pervious = 1,216,177 sf 1.43% Impervious = 17,706 sf

Summary for Subcatchment 1: Overland to Tracks

Runoff = 2.26 cfs @ 12.21 hrs, Volume= 20,388 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
221,626	30	Woods, Good, HSG A
1,500	39	>75% Grass cover, Good, HSG A
115,303	70	Woods, Good, HSG C
2,070	98	Unconnected roofs, HSG A
340,499	44	Weighted Average
338,429		99.39% Pervious Area
2,070		0.61% Impervious Area
2,070		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	35	0.1200	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
2.0	300	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	63	0.0660	4.14		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.4	62	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.0	92	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
2.4	102	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
14.0	654	Total			

Summary for Subcatchment 2: Overland to Pine Tree Drainage

Runoff = 3.65 cfs @ 12.12 hrs, Volume= 14,959 cf, Depth= 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
13,675	30	Woods, Good, HSG A
1,023	39	>75% Grass cover, Good, HSG A
56,140	70	Woods, Good, HSG C
1,475	98	Unconnected roofs, HSG A
5,227	98	Paved parking, HSG A
77,540	65	Weighted Average
70,838		91.36% Pervious Area
6,702		8.64% Impervious Area
1,475		22.01% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	35	0.1000	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.7	45	0.0440	1.05		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.8	250	0.2100	2.29		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	20	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	15	0.2600	2.55		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.6	42	0.0470	1.08		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	15	0.2600	3.57		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	57	0.0700	4.26		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.4	47	0.0100	2.03		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
12.5	526	Total			

Summary for Subcatchment 3: Overland towards Salisbury

Runoff = 6.08 cfs @ 12.18 hrs, Volume= 27,637 cf, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
119,920	70	Woods, Good, HSG C
119,920		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	50	0.0800	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.9	95	0.1150	1.70		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	173	0.1560	1.97		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.6	63	0.1280	1.79		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	30	0.1666	2.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	65	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.0	476	Total			

Summary for Subcatchment 3-1: Overland towards Salisbury

Runoff = 3.30 cfs @ 12.18 hrs, Volume= 15,184 cf, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
65,886	70	Woods, Good, HSG C
65,886		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	50	0.0800	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
3.9	430	0.1350	1.84		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.3	480	Total			

Summary for Subcatchment 4: Overland to south

Runoff = 3.30 cfs @ 12.19 hrs, Volume= 15,521 cf, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
3,160	30	Woods, Good, HSG A
68,960	70	Woods, Good, HSG C
72,120	68	Weighted Average
72,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	50	0.0600	0.06		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.7	62	0.0880	1.48		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	175	0.1600	2.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	63	0.0630	1.25		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.9	350	Total			

Summary for Subcatchment 5: To Bailey wetland

Runoff = 3.83 cfs @ 12.39 hrs, Volume= 33,054 cf, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

	Area (sf)	CN	Adj	Description
	136,512	30		Woods, Good, HSG A
	76,662	55		Woods, Good, HSG B
	109,528	70		Woods, Good, HSG C
*	777	77		Wetlands, Woods, Good, HSG D
	6,859	98		Unconnected roofs, HSG A
	2,075	98		Unconnected roofs, HSG B
	36,000	39		>75% Grass cover, Good, HSG A
	10,000	61		>75% Grass cover, Good, HSG B
	378,413	50	49	Weighted Average, UI Adjusted
	369,479			97.64% Pervious Area
	8,934			2.36% Impervious Area
	8,934			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	50	0.1000	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.2	28	0.2140	2.31		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.9	156	0.0770	1.39		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	46	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	112	0.0710	1.33		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	93	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.5	245	0.0050	0.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
28.3	730	Total			

Summary for Subcatchment 6: To Abut Wetlands

Runoff = 1.39 cfs @ 12.23 hrs, Volume= 7,207 cf, Depth= 2.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
10,302	55	Woods, Good, HSG B
25,683	70	Woods, Good, HSG C
35,985	66	Weighted Average
35,985		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	50	0.0800	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.7	75	0.1330	1.82		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	117	0.0690	1.31		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	50	0.2060	2.27		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	30	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.8	82	0.0240	0.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	25	0.1200	1.73		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	50	0.0400	1.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.7	130	0.0620	1.24		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
19.8	609	Total			

Summary for Subcatchment 7: Wetlands in old pit

Runoff = 0.55 cfs @ 12.33 hrs, Volume= 7,152 cf, Depth= 0.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

	Area (sf)	CN	Description
	95,348	30	Woods, Good, HSG A
	17,332	55	Woods, Good, HSG B
	13,256	70	Woods, Good, HSG C
*	17,584	73	Wetlands, Brush, Good, HSG D
	143,520	42	Weighted Average
	143,520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	50	0.1400	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
3.2	300	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	60	0.2300	2.40		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
3.1	150	0.0260	0.81		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	35	0.5700	3.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	15	0.1300	1.80		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.1	60	0.0330	0.91		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.0	670	Total			

Summary for Reach 5R: overland to Abut Wetland

Inflow Area = 378,413 sf, 2.36% Impervious, Inflow Depth = 0.00" for 25-yr event
Inflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 16.7 sf, Capacity= 6.09 cfs

50.00' x 0.50' deep Parabolic Channel, n= 0.400 Sheet flow: Woods+light brush
Length= 215.0' Slope= 0.0419 '/'
Inlet Invert= 777.00', Outlet Invert= 768.00'

‡

Summary for Pond 5P: Bailey Wetlands

Inflow Area = 378,413 sf, 2.36% Impervious, Inflow Depth = 1.05" for 25-yr event
Inflow = 3.83 cfs @ 12.39 hrs, Volume= 33,054 cf
Outflow = 1.96 cfs @ 12.92 hrs, Volume= 33,054 cf, Atten= 49%, Lag= 31.7 min
Discarded = 1.96 cfs @ 12.92 hrs, Volume= 33,054 cf
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 777.35' @ 12.92 hrs Surf.Area= 10,743 sf Storage= 4,529 cf

Plug-Flow detention time= 28.5 min calculated for 33,054 cf (100% of inflow)
Center-of-Mass det. time= 28.5 min (996.0 - 967.5)

Volume	Invert	Avail.Storage	Storage Description
#1	776.50'	14,025 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
776.50	777	0	0
777.00	5,759	1,634	1,634
777.50	12,860	4,655	6,289
778.00	18,086	7,737	14,025

Device	Routing	Invert	Outlet Devices
#1	Discarded	776.50'	**2.410 in/hr Exfiltration over Surface area above 776.50'** Conductivity to Groundwater Elevation = 776.49' Excluded Surface area = 777 sf
#2	Primary	777.50'	**30.0' long x 50.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=1.96 cfs @ 12.92 hrs HW=777.35' (Free Discharge)
↑—**1=Exfiltration** (Controls 1.96 cfs)

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=776.50' TW=777.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: Abutters Isolated wetland

Inflow Area = 414,398 sf, 2.16% Impervious, Inflow Depth = 0.21" for 25-yr event
Inflow = 1.39 cfs @ 12.23 hrs, Volume= 7,207 cf
Primary = 1.39 cfs @ 12.23 hrs, Volume= 7,207 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Summary for Pond 7P: wetlands

Inflow Area = 143,520 sf, 0.00% Impervious, Inflow Depth = 0.60" for 25-yr event
Inflow = 0.55 cfs @ 12.33 hrs, Volume= 7,152 cf
Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 751.60' @ 25.01 hrs Surf.Area= 17,584 sf Storage= 7,152 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	751.19'	26,376 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
751.19	17,584	0	0
752.69	17,584	26,376	26,376

Device	Routing	Invert	Outlet Devices
#1	Primary	752.69'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=751.19' TW=0.00' (Dynamic Tailwater)
↑**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link POA 1: Railroad Tracks

Inflow Area = 561,559 sf, 1.56% Impervious, Inflow Depth = 0.76" for 25-yr event
Inflow = 5.57 cfs @ 12.15 hrs, Volume= 35,347 cf
Primary = 5.57 cfs @ 12.15 hrs, Volume= 35,347 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Summary for Link POA 3: Salisbury Abutters

Inflow Area = 185,806 sf, 0.00% Impervious, Inflow Depth = 2.77" for 25-yr event
Inflow = 9.39 cfs @ 12.18 hrs, Volume= 42,822 cf
Primary = 9.39 cfs @ 12.18 hrs, Volume= 42,822 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

2-YEAR Pre-Development - Summary

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Overland to Tracks Runoff Area=340,499 sf 0.61% Impervious Runoff Depth=0.03"
Flow Length=654' Tc=14.0 min CN=44 Runoff=0.03 cfs 855 cf

Subcatchment 2: Overland to Pine Tree Runoff Area=77,540 sf 8.64% Impervious Runoff Depth=0.59"
Flow Length=526' Tc=12.5 min CN=65 Runoff=0.77 cfs 3,817 cf

Subcatchment 3: Overland towards Runoff Area=119,920 sf 0.00% Impervious Runoff Depth=0.82"
Flow Length=476' Tc=16.0 min CN=70 Runoff=1.72 cfs 8,159 cf

Subcatchment 3-1: Overland towards Runoff Area=65,886 sf 0.00% Impervious Runoff Depth=0.82"
Flow Length=480' Tc=16.3 min CN=70 Runoff=0.94 cfs 4,483 cf

Subcatchment 4: Overland to south Runoff Area=72,120 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=350' Tc=16.9 min CN=68 Runoff=0.85 cfs 4,338 cf

Subcatchment 5: To Bailey wetland Runoff Area=378,413 sf 2.36% Impervious Runoff Depth=0.10"
Flow Length=730' Tc=28.3 min UI Adjusted CN=49 Runoff=0.09 cfs 3,306 cf

Subcatchment 6: To Abut Wetlands Runoff Area=35,985 sf 0.00% Impervious Runoff Depth=0.63"
Flow Length=609' Tc=19.8 min CN=66 Runoff=0.32 cfs 1,898 cf

Subcatchment 7: Wetlands in old pit Runoff Area=143,520 sf 0.00% Impervious Runoff Depth=0.01"
Flow Length=670' Tc=18.0 min CN=42 Runoff=0.01 cfs 147 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.00 cfs 0 cf

Pond 5P: Bailey Wetlands Peak Elev=776.58' Storage=100 cf Inflow=0.09 cfs 3,306 cf
Discarded=0.09 cfs 3,306 cf Primary=0.00 cfs 0 cf Outflow=0.09 cfs 3,306 cf

Pond 6P: Abutters Isolated wetland Inflow=0.32 cfs 1,898 cf
Primary=0.32 cfs 1,898 cf

Pond 7P: wetlands Peak Elev=751.20' Storage=147 cf Inflow=0.01 cfs 147 cf
Outflow=0.00 cfs 0 cf

Link POA 1: Railroad Tracks Inflow=0.77 cfs 4,672 cf
Primary=0.77 cfs 4,672 cf

Link POA 3: Salisbury Abutters Inflow=2.66 cfs 12,642 cf
Primary=2.66 cfs 12,642 cf

10-YEAR Pre-Development - Summary

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Overland to Tracks Runoff Area=340,499 sf 0.61% Impervious Runoff Depth=0.36"
Flow Length=654' Tc=14.0 min CN=44 Runoff=0.58 cfs 10,349 cf

Subcatchment 2: Overland to Pine Tree Runoff Area=77,540 sf 8.64% Impervious Runoff Depth=1.58"
Flow Length=526' Tc=12.5 min CN=65 Runoff=2.45 cfs 10,214 cf

Subcatchment 3: Overland towards Runoff Area=119,920 sf 0.00% Impervious Runoff Depth=1.96"
Flow Length=476' Tc=16.0 min CN=70 Runoff=4.32 cfs 19,538 cf

Subcatchment 3-1: Overland towards Runoff Area=65,886 sf 0.00% Impervious Runoff Depth=1.96"
Flow Length=480' Tc=16.3 min CN=70 Runoff=2.35 cfs 10,735 cf

Subcatchment 4: Overland to south Runoff Area=72,120 sf 0.00% Impervious Runoff Depth=1.80"
Flow Length=350' Tc=16.9 min CN=68 Runoff=2.30 cfs 10,828 cf

Subcatchment 5: To Bailey wetland Runoff Area=378,413 sf 2.36% Impervious Runoff Depth=0.60"
Flow Length=730' Tc=28.3 min UI Adjusted CN=49 Runoff=1.61 cfs 18,818 cf

Subcatchment 6: To Abut Wetlands Runoff Area=35,985 sf 0.00% Impervious Runoff Depth=1.65"
Flow Length=609' Tc=19.8 min CN=66 Runoff=0.95 cfs 4,958 cf

Subcatchment 7: Wetlands in old pit Runoff Area=143,520 sf 0.00% Impervious Runoff Depth=0.28"
Flow Length=670' Tc=18.0 min CN=42 Runoff=0.14 cfs 3,399 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.00 cfs 0 cf

Pond 5P: Bailey Wetlands Peak Elev=777.02' Storage=1,777 cf Inflow=1.61 cfs 18,818 cf
Discarded=1.02 cfs 18,818 cf Primary=0.00 cfs 0 cf Outflow=1.02 cfs 18,818 cf

Pond 6P: Abutters Isolated wetland Inflow=0.95 cfs 4,958 cf
Primary=0.95 cfs 4,958 cf

Pond 7P: wetlands Peak Elev=751.38' Storage=3,399 cf Inflow=0.14 cfs 3,399 cf
Outflow=0.00 cfs 0 cf

Link POA 1: Railroad Tracks Inflow=2.62 cfs 20,563 cf
Primary=2.62 cfs 20,563 cf

Link POA 3: Salisbury Abutters Inflow=6.66 cfs 30,273 cf
Primary=6.66 cfs 30,273 cf

100-YEAR Pre-Development - Summary

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Overland to Tracks Runoff Area=340,499 sf 0.61% Impervious Runoff Depth=1.44"
Flow Length=654' Tc=14.0 min CN=44 Runoff=6.96 cfs 40,768 cf

Subcatchment 2: Overland to Pine Tree Runoff Area=77,540 sf 8.64% Impervious Runoff Depth=3.57"
Flow Length=526' Tc=12.5 min CN=65 Runoff=5.64 cfs 23,090 cf

Subcatchment 3: Overland towards Runoff Area=119,920 sf 0.00% Impervious Runoff Depth=4.12"
Flow Length=476' Tc=16.0 min CN=70 Runoff=8.93 cfs 41,198 cf

Subcatchment 3-1: Overland towards Runoff Area=65,886 sf 0.00% Impervious Runoff Depth=4.12"
Flow Length=480' Tc=16.3 min CN=70 Runoff=4.86 cfs 22,635 cf

Subcatchment 4: Overland to south Runoff Area=72,120 sf 0.00% Impervious Runoff Depth=3.90"
Flow Length=350' Tc=16.9 min CN=68 Runoff=4.94 cfs 23,448 cf

Subcatchment 5: To Bailey wetland Runoff Area=378,413 sf 2.36% Impervious Runoff Depth=1.91"
Flow Length=730' Tc=28.3 min UI Adjusted CN=49 Runoff=8.27 cfs 60,295 cf

Subcatchment 6: To Abut Wetlands Runoff Area=35,985 sf 0.00% Impervious Runoff Depth=3.68"
Flow Length=609' Tc=19.8 min CN=66 Runoff=2.13 cfs 11,042 cf

Subcatchment 7: Wetlands in old pit Runoff Area=143,520 sf 0.00% Impervious Runoff Depth=1.26"
Flow Length=670' Tc=18.0 min CN=42 Runoff=2.04 cfs 15,013 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.33' Max Vel=0.28 fps Inflow=3.48 cfs 5,953 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=2.50 cfs 5,953 cf

Pond 5P: Bailey Wetlands Peak Elev=777.62' Storage=7,954 cf Inflow=8.27 cfs 60,295 cf
Discarded=2.80 cfs 54,343 cf Primary=3.48 cfs 5,953 cf Outflow=6.28 cfs 60,295 cf

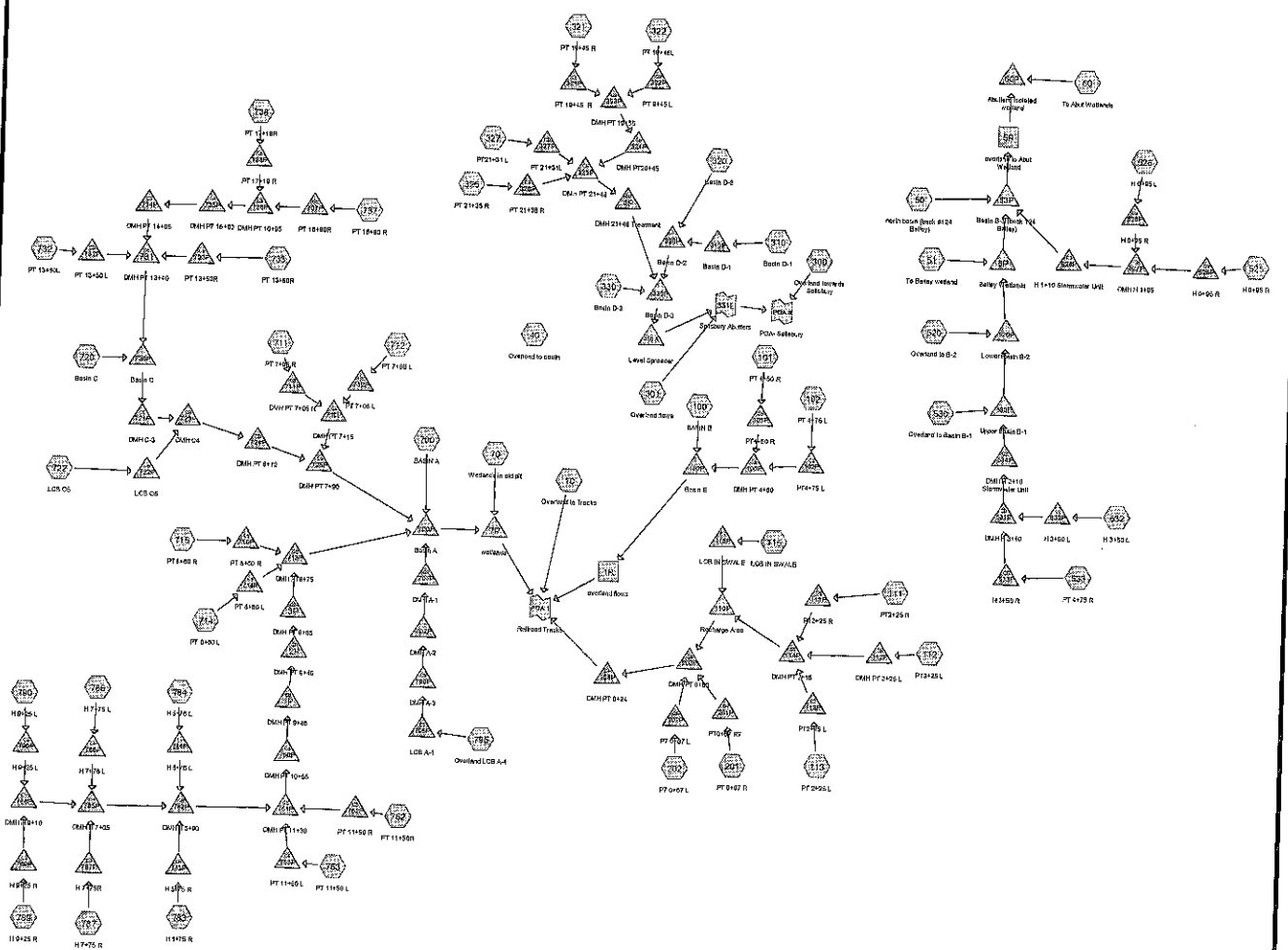
Pond 6P: Abutters Isolated wetland Inflow=3.11 cfs 16,995 cf
Primary=3.11 cfs 16,995 cf

Pond 7P: wetlands Peak Elev=752.04' Storage=15,013 cf Inflow=2.04 cfs 15,013 cf
Outflow=0.00 cfs 0 cf

Link POA 1: Railroad Tracks Inflow=12.37 cfs 63,858 cf
Primary=12.37 cfs 63,858 cf

Link POA 3: Salisbury Abutters Inflow=13.78 cfs 63,833 cf
Primary=13.78 cfs 63,833 cf

Post-Development



Subcat Reach Pond Link

Routing Diagram for Pine Tree Post- REV 2021(2)
Prepared by Places Associates, Inc., Printed 8/14/2021
HydroCAD® 10.10-4a s/n 02908 © 2020 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	25-yr	MA-Holden_files 24-hr S1	25-yr	Default	24.00	1	5.95	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
40,806	49	50-75% Grass cover, Fair, HSG A (60, 700)
150,322	39	>75% Grass cover, Good, HSG A (10, 40, 50, 51, 100, 101, 102, 111, 112, 113, 115, 201, 202, 520, 525, 526, 530, 532, 533, 700, 712)
31,313	61	>75% Grass cover, Good, HSG B (51, 520, 525, 526, 530)
304,795	74	>75% Grass cover, Good, HSG C (40, 102, 112, 113, 115, 202, 300, 301, 310, 320, 321, 322, 326, 327, 330, 526, 530, 532, 533, 700, 711, 712, 714, 715, 720, 722, 732, 733, 737, 738, 752, 753, 783, 784, 786, 787, 789, 790, 795)
62,320	98	Paved parking, HSG A (101, 102, 111, 112, 113, 201, 202, 525, 526, 532, 533, 711, 715)
15,025	98	Paved parking, HSG B (525, 526)
148,018	98	Paved parking, HSG C (112, 113, 115, 202, 532, 533, 711, 712, 714, 715, 720, 722, 732, 733, 737, 738, 752, 753, 783, 784, 786, 787, 789, 790)
27,454	98	Paved roads w/curbs & sewers, HSG C (321, 322, 326, 327)
19,360	98	Unconnected roofs, HSG A (10, 50, 51, 530, 700)
3,495	98	Unconnected roofs, HSG B (51, 530)
23,900	98	Unconnected roofs, HSG C (40, 300, 301, 310, 320, 530, 795)
17,584	73	Wetlands, Brush, Good, HSG D (70)
777	77	Wetlands, Woods, Good, HSG D (51)
838	73	Woods, Fair, HSG C (40)
251,667	30	Woods, Good, HSG A (10, 51, 60, 70, 102, 112, 202, 700)
66,538	55	Woods, Good, HSG B (51, 70)
69,671	70	Woods, Good, HSG C (60, 102, 112, 113, 115, 202, 300, 301, 712)
1,233,883	**64**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
524,475	HSG A	10, 40, 50, 51, 60, 70, 100, 101, 102, 111, 112, 113, 115, 201, 202, 520, 525, 526, 530, 532, 533, 700, 711, 712, 715
116,371	HSG B	51, 70, 520, 525, 526, 530
574,676	HSG C	40, 60, 102, 112, 113, 115, 202, 300, 301, 310, 320, 321, 322, 326, 327, 330, 526, 530, 532, 533, 700, 711, 712, 714, 715, 720, 722, 732, 733, 737, 738, 752, 753, 783, 784, 786, 787, 789, 790, 795
18,361	HSG D	51, 70
0	Other	
1,233,883		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
40,806	0	0	0	0	40,806	50-75% Grass cover, Fair
150,322	31,313	304,795	0	0	486,430	>75% Grass cover, Good
62,320	15,025	148,018	0	0	225,363	Paved parking
0	0	27,454	0	0	27,454	Paved roads w/curbs & sewers
19,360	3,495	23,900	0	0	46,755	Unconnected roofs
0	0	0	17,584	0	17,584	Wetlands, Brush, Good
0	0	0	777	0	777	Wetlands, Woods, Good
0	0	838	0	0	838	Woods, Fair
251,667	66,538	69,671	0	0	387,876	Woods, Good
524,475	**116,371**	**574,676**	**18,361**	**0**	**1,233,883**	**TOTAL AREA**

25-YEAR Post-Development – Detailed Printout

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10: Overland to Tracks Runoff Area=151,286 sf 4.60% Impervious Runoff Depth=0.16"
Flow Length=257' Tc=15.7 min UI Adjusted CN=33 Runoff=0.05 cfs 2,028 cf

Subcatchment 40: Overland to south Runoff Area=13,973 sf 12.06% Impervious Runoff Depth=2.95"
Flow Length=350' Tc=16.9 min UI Adjusted CN=72 Runoff=0.74 cfs 3,438 cf

Subcatchment 50: north basin (back #124 Runoff Area=20,232 sf 8.58% Impervious Runoff Depth=0.60"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.11 cfs 1,008 cf

Subcatchment 51: To Bailey wetland Runoff Area=149,516 sf 4.81% Impervious Runoff Depth=0.72"
Flow Length=720' Tc=26.5 min UI Adjusted CN=44 Runoff=0.76 cfs 8,952 cf

Subcatchment 60: To Abut Wetlands Runoff Area=9,934 sf 0.00% Impervious Runoff Depth=0.38"
Flow Length=615' Tc=9.9 min CN=38 Runoff=0.01 cfs 314 cf

Subcatchment 70: Wetlands in old pit Runoff Area=88,870 sf 0.00% Impervious Runoff Depth=0.66"
Flow Length=230' Tc=12.4 min CN=43 Runoff=0.50 cfs 4,868 cf

Subcatchment 100: BASIN E Runoff Area=5,648 sf 0.00% Impervious Runoff Depth=0.43"
Flow Length=257' Tc=15.7 min CN=39 Runoff=0.01 cfs 203 cf

Subcatchment 101: PT 4+50 R Runoff Area=4,630 sf 52.31% Impervious Runoff Depth=2.77"
Tc=6.0 min CN=70 Runoff=0.37 cfs 1,067 cf

Subcatchment 102: PT 4+75 L Runoff Area=23,668 sf 14.48% Impervious Runoff Depth=1.81"
Tc=6.0 min CN=59 Runoff=1.14 cfs 3,564 cf

Subcatchment 111: PT2+25 R Runoff Area=5,678 sf 52.22% Impervious Runoff Depth=2.77"
Tc=6.0 min CN=70 Runoff=0.45 cfs 1,309 cf

Subcatchment 112: PT3+25 L Runoff Area=25,455 sf 27.54% Impervious Runoff Depth=3.05"
Flow Length=265' Tc=6.0 min CN=73 Runoff=2.25 cfs 6,464 cf

Subcatchment 113: PT 2+25 L Runoff Area=19,505 sf 25.84% Impervious Runoff Depth=3.44"
Flow Length=410' Tc=8.8 min CN=77 Runoff=1.67 cfs 5,584 cf

Subcatchment 115: LCB IN SWALE Runoff Area=21,365 sf 13.20% Impervious Runoff Depth=2.58"
Flow Length=250' Tc=6.9 min CN=68 Runoff=1.49 cfs 4,598 cf

Subcatchment 201: PT 0+67 R Runoff Area=6,315 sf 63.90% Impervious Runoff Depth=3.44"
Tc=6.0 min CN=77 Runoff=0.63 cfs 1,808 cf

Subcatchment 202: PT 0+67 L Runoff Area=40,700 sf 20.33% Impervious Runoff Depth=2.23"
Flow Length=250' Tc=6.9 min CN=64 Runoff=2.40 cfs 7,556 cf

Subcatchment 300: Overland towards Runoff Area=64,224 sf 21.45% Impervious Runoff Depth=3.24"
Flow Length=251' Tc=7.7 min UI Adjusted CN=75 Runoff=5.49 cfs 17,338 cf

Subcatchment 301: Overland flows Runoff Area=22,936 sf 6.29% Impervious Runoff Depth=3.05"
Flow Length=286' Tc=15.4 min UI Adjusted CN=73 Runoff=1.32 cfs 5,824 cf

Subcatchment 310: Basin D-1 Runoff Area=14,240 sf 8.95% Impervious Runoff Depth=3.24"
Flow Length=162' Tc=6.7 min UI Adjusted CN=75 Runoff=1.29 cfs 3,844 cf

Subcatchment 320: Basin D-2 Runoff Area=12,960 sf 4.90% Impervious Runoff Depth=3.24"
Flow Length=162' Tc=6.7 min CN=75 Runoff=1.18 cfs 3,499 cf

Subcatchment 321: PT 19+45 R Runoff Area=15,840 sf 40.08% Impervious Runoff Depth=4.15"
Flow Length=235' Tc=6.5 min CN=84 Runoff=1.84 cfs 5,478 cf

Subcatchment 322: PT 19+45L Runoff Area=6,505 sf 77.97% Impervious Runoff Depth=5.13"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=0.91 cfs 2,783 cf

Subcatchment 326: PT 21+35 R Runoff Area=15,800 sf 52.72% Impervious Runoff Depth=4.47"
Flow Length=255' Tc=6.0 min CN=87 Runoff=2.01 cfs 5,885 cf

Subcatchment 327: PT21+31 L Runoff Area=9,125 sf 84.42% Impervious Runoff Depth=5.25"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=94 Runoff=1.29 cfs 3,990 cf

Subcatchment 330: Basin D-3 Runoff Area=7,135 sf 0.00% Impervious Runoff Depth=3.14"
Tc=6.0 min CN=74 Runoff=0.65 cfs 1,869 cf

Subcatchment 520: Overland to B-2 Runoff Area=6,010 sf 0.00% Impervious Runoff Depth=0.85"
Tc=6.0 min CN=46 Runoff=0.08 cfs 424 cf

Subcatchment 525: H 0+95 R Runoff Area=9,755 sf 76.99% Impervious Runoff Depth=4.69"
Tc=6.0 min CN=89 Runoff=1.29 cfs 3,810 cf

Subcatchment 526: H 0+95 L Runoff Area=39,223 sf 45.64% Impervious Runoff Depth=3.14"
Tc=6.0 min CN=74 Runoff=3.58 cfs 10,273 cf

Subcatchment 530: Overland to Basin B-1 Runoff Area=22,840 sf 17.14% Impervious Runoff Depth=1.57"
Tc=6.0 min UI Adjusted CN=56 Runoff=0.91 cfs 2,982 cf

Subcatchment 532: H 3+50 L Runoff Area=40,120 sf 42.09% Impervious Runoff Depth=3.34"
Tc=6.0 min CN=76 Runoff=3.90 cfs 11,157 cf

Subcatchment 533: PT 4+75 R Runoff Area=17,030 sf 50.44% Impervious Runoff Depth=2.77"
Tc=6.0 min CN=70 Runoff=1.36 cfs 3,925 cf

Subcatchment 700: BASIN A Runoff Area=51,250 sf 6.22% Impervious Runoff Depth=1.19"
Flow Length=230' Tc=12.4 min UI Adjusted CN=51 Runoff=0.98 cfs 5,083 cf

Subcatchment 711: PT 7+05 R Runoff Area=16,365 sf 95.20% Impervious Runoff Depth>5.59"
Tc=6.0 min CN=97 Runoff=2.38 cfs 7,628 cf

Subcatchment 712: PT 7+05 L Runoff Area=18,095 sf 37.25% Impervious Runoff Depth=3.84"
Tc=6.0 min CN=81 Runoff=2.02 cfs 5,788 cf

Subcatchment 714: PT 8+60 L Runoff Area=21,660 sf 49.78% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=86 Runoff=2.70 cfs 7,873 cf

Subcatchment 715: PT 8+60 R Runoff Area=20,770 sf 67.88% Impervious Runoff Depth=4.80"
Tc=6.0 min CN=90 Runoff=2.79 cfs 8,303 cf

Subcatchment 720: Basin C Runoff Area=17,205 sf 17.06% Impervious Runoff Depth=3.53"
Tc=6.0 min CN=78 Runoff=1.77 cfs 5,068 cf

Subcatchment 722: LCB C5 Runoff Area=15,270 sf 71.38% Impervious Runoff Depth=4.91"
Tc=6.0 min CN=91 Runoff=2.08 cfs 6,246 cf

Subcatchment 732: PT 13+50L Runoff Area=8,140 sf 76.54% Impervious Runoff Depth=5.02"
Tc=6.0 min CN=92 Runoff=1.12 cfs 3,405 cf

Subcatchment 733: PT 13+50R Runoff Area=23,650 sf 51.78% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=86 Runoff=2.95 cfs 8,597 cf

Subcatchment 737: PT 16+80 R Runoff Area=4,200 sf 53.93% Impervious Runoff Depth=4.47"
Tc=6.0 min CN=87 Runoff=0.53 cfs 1,564 cf

Subcatchment 738: PT 17+18R Runoff Area=6,035 sf 55.39% Impervious Runoff Depth=4.47"
Tc=6.0 min CN=87 Runoff=0.77 cfs 2,248 cf

Subcatchment 752: PT 11+50R Runoff Area=6,875 sf 67.88% Impervious Runoff Depth=4.80"
Tc=6.0 min CN=90 Runoff=0.92 cfs 2,748 cf

Subcatchment 753: PT 11+50 L Runoff Area=13,835 sf 48.95% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=86 Runoff=1.73 cfs 5,029 cf

Subcatchment 783: H 5+75 R Runoff Area=10,875 sf 67.21% Impervious Runoff Depth=4.80"
Tc=6.0 min CN=90 Runoff=1.46 cfs 4,347 cf

Subcatchment 784: H 5+75 L Runoff Area=21,665 sf 46.65% Impervious Runoff Depth=4.26"
Tc=6.0 min CN=85 Runoff=2.65 cfs 7,683 cf

Subcatchment 786: H 7+75 L Runoff Area=10,670 sf 25.26% Impervious Runoff Depth=3.74"
Tc=6.0 min CN=80 Runoff=1.16 cfs 3,322 cf

Subcatchment 787: H 7+75 R Runoff Area=20,420 sf 58.43% Impervious Runoff Depth=4.58"
Tc=6.0 min CN=88 Runoff=2.65 cfs 7,790 cf

Subcatchment 789: H 9+25 R Runoff Area=11,750 sf 40.84% Impervious Runoff Depth=4.15"
Tc=6.0 min CN=84 Runoff=1.40 cfs 4,063 cf

Subcatchment 790: H 9+25 L Runoff Area=10,530 sf 48.30% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=86 Runoff=1.31 cfs 3,828 cf

Subcatchment 795: Overland LCB A-4 Runoff Area=34,105 sf 14.51% Impervious Runoff Depth=3.34"
Tc=6.0 min UI Adjusted CN=76 Runoff=3.31 cfs 9,484 cf

Reach 1R: overland flows Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.130 L=200.0' S=0.1950 '/' Capacity=2.21 cfs Outflow=0.00 cfs 0 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.17' Max Vel=0.18 fps Inflow=0.70 cfs 4,675 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.62 cfs 4,674 cf

Pond 1P: DMH PT 9+85 Peak Elev=795.49' Inflow=13.28 cfs 38,810 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=13.28 cfs 38,810 cf

Pond 2P: DMH PT 9+45 Peak Elev=795.05' Inflow=13.28 cfs 38,810 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=13.28 cfs 38,810 cf

Pond 3P: DMH PT 9+05 Peak Elev=794.60' Inflow=13.28 cfs 38,810 cf
36.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=13.28 cfs 38,810 cf

Pond 4P: DMH 21+48 Treatment Peak Elev=817.94' Inflow=6.04 cfs 18,135 cf
18.0" Round Culvert n=0.013 L=18.0' S=0.0100 '/' Outflow=6.04 cfs 18,135 cf

Pond 5P: Bailey Wetlands Peak Elev=777.65' Storage=3,972 cf Inflow=2.63 cfs 17,644 cf
Discarded=0.38 cfs 11,952 cf Primary=0.85 cfs 5,691 cf Outflow=1.23 cfs 17,643 cf

Pond 7P: wetlands Peak Elev=751.47' Storage=4,868 cf Inflow=0.50 cfs 4,868 cf
Outflow=0.00 cfs 0 cf

Pond 53P: Basin B-3-(back 124 Bailey) Peak Elev=777.64' Storage=3,659 cf Inflow=4.95 cfs 20,782 cf
Discarded=0.48 cfs 16,110 cf Primary=0.70 cfs 4,675 cf Outflow=1.17 cfs 20,785 cf

Pond 60P: Abutters Isolated wetland Inflow=0.63 cfs 4,989 cf
Primary=0.63 cfs 4,989 cf

Pond 100P: Basin E Peak Elev=788.83' Storage=1,114 cf Inflow=1.51 cfs 4,834 cf
Discarded=0.26 cfs 4,834 cf Primary=0.00 cfs 0 cf Outflow=0.26 cfs 4,834 cf

Pond 101P: PT4+50 R Peak Elev=789.83' Inflow=0.37 cfs 1,067 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0173 '/' Outflow=0.37 cfs 1,067 cf

Pond 102P: PT4+75 L Peak Elev=790.04' Inflow=1.14 cfs 3,564 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=1.14 cfs 3,564 cf

Pond 105P: DMH PT 4+60 Peak Elev=789.75' Inflow=1.51 cfs 4,631 cf
15.0" Round Culvert n=0.013 L=39.0' S=0.0297 '/' Outflow=1.51 cfs 4,631 cf

Pond 110P: Recharge Area Peak Elev=770.68' Storage=4,182 cf Inflow=5.75 cfs 17,954 cf
Discarded=0.51 cfs 16,403 cf Primary=1.51 cfs 1,552 cf Outflow=2.02 cfs 17,954 cf

Pond 111P: PT2+25 R Peak Elev=772.23' Inflow=0.45 cfs 1,309 cf
12.0" Round Culvert n=0.013 L=19.0' S=0.0242 '/' Outflow=0.45 cfs 1,309 cf

Pond 112P: DMH PT 3+25 L Peak Elev=780.09' Inflow=2.25 cfs 6,464 cf
12.0" Round Culvert n=0.013 L=110.0' S=0.0743 '/' Outflow=2.25 cfs 6,464 cf

Pond 113P: PT2+25 L Peak Elev=772.44' Inflow=1.67 cfs 5,584 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0391 '/' Outflow=1.67 cfs 5,584 cf

Pond 114P: DMH PT 2+15 Peak Elev=772.20' Inflow=4.25 cfs 13,356 cf
15.0" Round Culvert n=0.013 L=59.0' S=0.0200 '/' Outflow=4.25 cfs 13,356 cf

Pond 115P: LCB IN SWALE Peak Elev=770.70' Inflow=1.49 cfs 4,598 cf
12.0" Round Culvert n=0.013 L=5.0' S=0.0000 '/' Outflow=1.49 cfs 4,598 cf

Pond 201P: PT0+67 RT Peak Elev=766.90' Inflow=0.63 cfs 1,808 cf
12.0" Round Culvert n=0.013 L=23.0' S=0.0200 '/' Outflow=0.63 cfs 1,808 cf

Pond 202P: PT 0+67 L Peak Elev=767.55' Inflow=2.40 cfs 7,556 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0128 '/' Outflow=2.40 cfs 7,556 cf

Pond 203P: DMH PT 0+50 Peak Elev=766.32' Inflow=3.02 cfs 10,916 cf
18.0" Round Culvert n=0.013 L=55.0' S=0.0160 '/' Outflow=3.02 cfs 10,916 cf

Pond 204P: DMH PT 0+24 Peak Elev=765.44' Inflow=3.02 cfs 10,916 cf
18.0" Round Culvert n=0.013 L=74.0' S=0.0200 '/' Outflow=3.02 cfs 10,916 cf

Pond 310P: Basin D-1 Peak Elev=836.03' Storage=1,640 cf Inflow=1.29 cfs 3,844 cf
Outflow=0.16 cfs 3,146 cf

Pond 320P: Basin D-2 Peak Elev=819.11' Storage=5,637 cf Inflow=1.26 cfs 6,645 cf
Discarded=0.03 cfs 1,385 cf Primary=0.00 cfs 0 cf Outflow=0.03 cfs 1,385 cf

Pond 321P: PT 19+45 R Peak Elev=823.34' Inflow=1.84 cfs 5,478 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0400 '/' Outflow=1.84 cfs 5,478 cf

Pond 322P: PT 9+45 L Peak Elev=823.13' Inflow=0.91 cfs 2,783 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0218 '/' Outflow=0.91 cfs 2,783 cf

Pond 323P: DMH PT 19+55 Peak Elev=822.80' Inflow=2.75 cfs 8,260 cf
12.0" Round Culvert n=0.013 L=99.0' S=0.0200 '/' Outflow=2.75 cfs 8,260 cf

Pond 324P: DMH PT20+45 Peak Elev=820.82' Inflow=2.75 cfs 8,260 cf
12.0" Round Culvert n=0.013 L=93.0' S=0.0219 '/' Outflow=2.75 cfs 8,260 cf

Pond 325P: DMH PT 21+48 Peak Elev=818.44' Inflow=6.04 cfs 18,135 cf
18.0" Round Culvert n=0.013 L=10.0' S=0.0200 '/' Outflow=6.04 cfs 18,135 cf

Pond 326P: PT 21+35 R Peak Elev=818.70' Inflow=2.01 cfs 5,885 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0215 '/' Outflow=2.01 cfs 5,885 cf

Pond 327P: PT 21+31L Peak Elev=818.56' Inflow=1.29 cfs 3,990 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0049 '/' Outflow=1.29 cfs 3,990 cf

Pond 330-A: Level Spreader Peak Elev=806.05' Storage=188 cf Inflow=1.45 cfs 7,259 cf
Discarded=0.00 cfs 257 cf Primary=1.47 cfs 6,985 cf Outflow=1.47 cfs 7,242 cf

Pond 330P: Basin D-3 Peak Elev=813.75' Storage=6,678 cf Inflow=6.70 cfs 20,004 cf
Discarded=0.29 cfs 12,515 cf Primary=1.45 cfs 7,259 cf Outflow=1.73 cfs 19,774 cf

Pond 520P: Lower Basin B-2 Peak Elev=780.36' Storage=3,351 cf Inflow=5.87 cfs 15,018 cf
Discarded=0.19 cfs 6,327 cf Primary=2.26 cfs 8,692 cf Outflow=2.45 cfs 15,018 cf

Pond 525P: H 0+95 R Peak Elev=779.37' Inflow=1.29 cfs 3,810 cf
12.0" Round Culvert n=0.013 L=10.0' S=0.0420 '/' Outflow=1.29 cfs 3,810 cf

Pond 526P: H 0+95 R Peak Elev=779.61' Inflow=3.58 cfs 10,273 cf
15.0" Round Culvert n=0.013 L=21.0' S=0.0200 '/' Outflow=3.58 cfs 10,273 cf

Pond 527P: DMH H 1+05 Peak Elev=779.26' Inflow=4.87 cfs 14,083 cf
15.0" Round Culvert n=0.013 L=14.0' S=0.0200 '/' Outflow=4.87 cfs 14,083 cf

Pond 528P: H 1+10 Stormwater Unit Peak Elev=778.59' Inflow=4.87 cfs 14,083 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0200 '/' Outflow=4.87 cfs 14,083 cf

Pond 530P: Upper Basin B-1 Peak Elev=785.75' Storage=1,726 cf Inflow=6.17 cfs 18,064 cf
Discarded=0.10 cfs 3,469 cf Primary=5.78 cfs 14,595 cf Outflow=5.88 cfs 18,064 cf

Pond 531P: DMH H 3+40 Peak Elev=787.92' Inflow=5.26 cfs 15,082 cf
15.0" Round Culvert n=0.013 L=34.0' S=0.0300 '/' Outflow=5.26 cfs 15,082 cf

Pond 532P: H 3+50 L Peak Elev=788.53' Inflow=3.90 cfs 11,157 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0394 '/' Outflow=3.90 cfs 11,157 cf

Pond 533P: H 3+50 R Peak Elev=788.19' Inflow=1.36 cfs 3,925 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0592 '/' Outflow=1.36 cfs 3,925 cf

Pond 534P: DMH H 3+10 Stormwater Unit Peak Elev=786.90' Inflow=5.26 cfs 15,082 cf
15.0" Round Culvert n=0.013 L=43.0' S=0.0344 '/' Outflow=5.26 cfs 15,082 cf

Pond 700P: Basin A Peak Elev=788.10' Storage=51,515 cf Inflow=35.05 cfs 107,884 cf
Discarded=1.58 cfs 98,003 cf Primary=0.00 cfs 0 cf Outflow=1.58 cfs 98,003 cf

Pond 701P: DMH A-1 Peak Elev=793.70' Inflow=3.31 cfs 9,484 cf
15.0" Round Culvert n=0.013 L=50.0' S=0.1450 '/' Outflow=3.31 cfs 9,484 cf

Pond 702P: DMH A-2 Peak Elev=805.65' Inflow=3.31 cfs 9,484 cf
15.0" Round Culvert n=0.013 L=168.0' S=0.0711 '/' Outflow=3.31 cfs 9,484 cf

Pond 710P: DMH PT 7+15 Peak Elev=797.17' Inflow=4.39 cfs 13,415 cf
15.0" Round Culvert n=0.013 L=80.0' S=0.0100 '/' Outflow=4.39 cfs 13,415 cf

Pond 711P: DMH PT 7+05 R Peak Elev=797.56' Inflow=2.38 cfs 7,628 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0191 '/' Outflow=2.38 cfs 7,628 cf

Pond 712P: PT 7+05 L Peak Elev=797.45' Inflow=2.02 cfs 5,788 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=2.02 cfs 5,788 cf

Pond 713P: DMH PT8+75 Peak Elev=794.14' Inflow=18.76 cfs 54,987 cf
36.0" Round Culvert n=0.013 L=129.0' S=0.0343 '/' Outflow=18.76 cfs 54,987 cf

Pond 714P: PT 8+60 L Peak Elev=798.31' Inflow=2.70 cfs 7,873 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0281 '/' Outflow=2.70 cfs 7,873 cf

Pond 715P: PT 8+60 R Peak Elev=801.12' Inflow=2.79 cfs 8,303 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0325 '/' Outflow=2.79 cfs 8,303 cf

Pond 720P: Basin C Peak Elev=818.88' Storage=5,207 cf Inflow=7.15 cfs 20,882 cf
Primary=6.43 cfs 18,670 cf Secondary=0.00 cfs 0 cf Outflow=6.43 cfs 18,670 cf

Pond 721P: DMH C-3 Peak Elev=815.88' Inflow=6.43 cfs 18,670 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0100 '/' Outflow=6.43 cfs 18,670 cf

Pond 722P: LCB C5 Peak Elev=814.81' Inflow=2.08 cfs 6,246 cf
12.0" Round Culvert n=0.013 L=17.0' S=0.0588 '/' Outflow=2.08 cfs 6,246 cf

Pond 723P: DMH C4 Peak Elev=812.62' Inflow=8.34 cfs 24,915 cf
15.0" Round Culvert n=0.013 L=173.0' S=0.0650 '/' Outflow=8.34 cfs 24,915 cf

Pond 724P: DMH PT 8+12 Peak Elev=799.71' Inflow=8.34 cfs 24,915 cf
18.0" Round Culvert n=0.013 L=48.0' S=0.0833 '/' Outflow=8.34 cfs 24,915 cf

Pond 725P: DMH PT 7+90 Peak Elev=794.69' Inflow=12.58 cfs 38,331 cf
24.0" Round Culvert n=0.013 L=102.0' S=0.0490 '/' Outflow=12.58 cfs 38,331 cf

Pond 731: DMH PT 13+40 Peak Elev=824.70' Inflow=5.38 cfs 15,814 cf
15.0" Round Culvert n=0.013 L=54.0' S=0.0231 '/' Outflow=5.38 cfs 15,814 cf

Pond 732P: PT 13+50 L Peak Elev=826.78' Inflow=1.12 cfs 3,405 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0200 '/' Outflow=1.12 cfs 3,405 cf

Pond 733P: PT 13+50R Peak Elev=825.30' Inflow=2.95 cfs 8,597 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0250 '/' Outflow=2.95 cfs 8,597 cf

Pond 734P: DMH PT 14+95 Peak Elev=828.85' Inflow=1.30 cfs 3,812 cf
12.0" Round Culvert n=0.013 L=156.0' S=0.0302 '/' Outflow=1.30 cfs 3,812 cf

Pond 735P: DMH PT 15+60 Peak Elev=829.56' Inflow=1.30 cfs 3,812 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0100 '/' Outflow=1.30 cfs 3,812 cf

Pond 736P: DMH PT 16+95 Peak Elev=830.89' Inflow=1.30 cfs 3,812 cf
12.0" Round Culvert n=0.013 L=136.0' S=0.0100 '/' Outflow=1.30 cfs 3,812 cf

Pond 737P: PT 16+80R Peak Elev=831.14' Inflow=0.53 cfs 1,564 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0165 '/' Outflow=0.53 cfs 1,564 cf

Pond 738P: PT 17+19 R Peak Elev=831.14' Inflow=0.77 cfs 2,248 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0100 '/' Outflow=0.77 cfs 2,248 cf

Pond 750P: DMH PT 10+55 Peak Elev=796.10' Inflow=13.28 cfs 38,810 cf
36.0" Round Culvert n=0.013 L=74.0' S=0.0100 '/' Outflow=13.28 cfs 38,810 cf

Pond 751P: DMH PT 11+30 Peak Elev=798.03' Inflow=13.28 cfs 38,810 cf
24.0" Round Culvert n=0.013 L=79.0' S=0.0100 '/' Outflow=13.28 cfs 38,810 cf

Pond 752P: PT 11+50 R Peak Elev=812.12' Inflow=0.92 cfs 2,748 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0348 '/' Outflow=0.92 cfs 2,748 cf

Pond 753P: PT 11+50 L Peak Elev=812.34' Inflow=1.73 cfs 5,029 cf
12.0" Round Culvert n=0.013 L=29.0' S=0.0252 '/' Outflow=1.73 cfs 5,029 cf

Pond 780P: DMH A-3 Peak Elev=807.00' Inflow=3.31 cfs 9,484 cf
15.0" Round Culvert n=0.013 L=90.0' S=0.0150 '/' Outflow=3.31 cfs 9,484 cf

Pond 782P: DMH H 5+90 Peak Elev=801.26' Inflow=10.63 cfs 31,033 cf
24.0" Round Culvert n=0.013 L=235.0' S=0.0150 '/' Outflow=10.63 cfs 31,033 cf

Pond 783P: H 5+75 R Peak Elev=801.65' Inflow=1.46 cfs 4,347 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0100 '/' Outflow=1.46 cfs 4,347 cf

Pond 784P: H 5+75 L Peak Elev=801.96' Inflow=2.65 cfs 7,683 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0150 '/' Outflow=2.65 cfs 7,683 cf

Pond 785P: DMH H 7+65 Peak Elev=819.28' Inflow=6.52 cfs 19,003 cf
15.0" Round Culvert n=0.013 L=175.0' S=0.0968 '/' Outflow=6.52 cfs 19,003 cf

Pond 786P: H 7+75 L Peak Elev=820.40' Inflow=1.16 cfs 3,322 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0332 '/' Outflow=1.16 cfs 3,322 cf

Pond 787P: H 7+75R Peak Elev=820.83' Inflow=2.65 cfs 7,790 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0608 '/' Outflow=2.65 cfs 7,790 cf

Pond 788P: DMH H 9+10 Peak Elev=829.57' Inflow=2.72 cfs 7,891 cf
12.0" Round Culvert n=0.013 L=143.0' S=0.0700 '/' Outflow=2.72 cfs 7,891 cf

Pond 789P: H 9+25 R Peak Elev=829.93' Inflow=1.40 cfs 4,063 cf
12.0" Round Culvert n=0.013 L=14.0' S=0.0429 '/' Outflow=1.40 cfs 4,063 cf

Pond 790P: H 9+25 L Peak Elev=829.93' Inflow=1.31 cfs 3,828 cf
12.0" Round Culvert n=0.013 L=25.0' S=0.0240 '/' Outflow=1.31 cfs 3,828 cf

Pond 795P: LCB A-4 Peak Elev=809.77' Inflow=3.31 cfs 9,484 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0445 '/' Outflow=3.31 cfs 9,484 cf

Link 331L: Salisbury Abutters Inflow=2.77 cfs 12,809 cf
Primary=2.77 cfs 12,809 cf

Link POA 1: Railroad Tracks Inflow=3.02 cfs 12,944 cf
Primary=3.02 cfs 12,944 cf

Link POA 3: POA- Salisbury

Inflow=7.68 cfs 30,147 cf
Primary=7.68 cfs 30,147 cf

Total Runoff Area = 1,233,883 sf Runoff Volume = 245,936 cf Average Runoff Depth = 2.39"
75.72% Pervious = 934,311 sf 24.28% Impervious = 299,572 sf

Summary for Subcatchment 10: Overland to Tracks

Runoff = 0.05 cfs @ 17.22 hrs, Volume= 2,028 cf, Depth= 0.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
122,426	30		Woods, Good, HSG A
21,900	39		>75% Grass cover, Good, HSG A
6,960	98		Unconnected roofs, HSG A
151,286	34	33	Weighted Average, UI Adjusted
144,326			95.40% Pervious Area
6,960			4.60% Impervious Area
6,960			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	40	0.0500	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.2	35	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.1	100	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.9	82	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
15.7	257	Total			

Summary for Subcatchment 40: Overland to south

Runoff = 0.74 cfs @ 12.19 hrs, Volume= 3,438 cf, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
1,400	39		>75% Grass cover, Good, HSG A
10,050	74		>75% Grass cover, Good, HSG C
1,685	98		Unconnected roofs, HSG C
838	73		Woods, Fair, HSG C
13,973	73	72	Weighted Average, UI Adjusted
12,288			87.94% Pervious Area
1,685			12.06% Impervious Area
1,685			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	50	0.0600	0.06		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.7	62	0.0880	1.48		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	175	0.1600	2.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	63	0.0630	1.25		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.9	350	Total			

Summary for Subcatchment 50: north basin (back #124 Bailey)

Runoff = 0.11 cfs @ 12.08 hrs, Volume= 1,008 cf, Depth= 0.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
1,735	98		Unconnected roofs, HSG A
18,497	39		>75% Grass cover, Good, HSG A
20,232	44	42	Weighted Average, UI Adjusted
18,497			91.42% Pervious Area
1,735			8.58% Impervious Area
1,735			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 51: To Bailey wetland

Runoff = 0.76 cfs @ 12.43 hrs, Volume= 8,952 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

	Area (sf)	CN	Adj	Description
	57,398	30		Woods, Good, HSG A
	49,206	55		Woods, Good, HSG B
*	777	77		Wetlands, Woods, Good, HSG D
	24,936	39		>75% Grass cover, Good, HSG A
	10,000	61		>75% Grass cover, Good, HSG B
	5,124	98		Unconnected roofs, HSG A
	2,075	98		Unconnected roofs, HSG B
	149,516	45	44	Weighted Average, UI Adjusted
	142,317			95.19% Pervious Area
	7,199			4.81% Impervious Area
	7,199			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	40	0.1000	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.2	28	0.2140	2.31		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.9	156	0.0770	1.39		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	46	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.4	112	0.0710	1.33		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.5	93	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.5	245	0.0050	0.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
26.5	720	Total			

Summary for Subcatchment 60: To Abut Wetlands

Runoff = 0.01 cfs @ 12.53 hrs, Volume= 314 cf, Depth= 0.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
435	70	Woods, Good, HSG C
6,369	30	Woods, Good, HSG A
3,130	49	50-75% Grass cover, Fair, HSG A
9,934	38	Weighted Average
9,934		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	16	0.4200	0.40		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
2.7	34	0.1500	0.21		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.17"
0.1	9	0.1500	1.94		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.6	125	0.0720	1.34		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	55	0.1800	2.12		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.6	27	0.0240	0.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.3	82	0.0240	1.08		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	25	0.1200	1.73		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	62	0.1700	2.06		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.6	50	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.2	130	0.0620	1.74		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
9.9	615	Total			

Summary for Subcatchment 70: Wetlands in old pit

Runoff = 0.50 cfs @ 12.19 hrs, Volume= 4,868 cf, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

	Area (sf)	CN	Description
	53,954	30	Woods, Good, HSG A
	17,332	55	Woods, Good, HSG B
*	17,584	73	Wetlands, Brush, Good, HSG D
	88,870	43	Weighted Average
	88,870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	50	0.1400	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
1.1	70	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	35	0.5700	3.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	15	0.1300	1.80		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.1	60	0.0330	0.91		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
12.4	230	Total			

Summary for Subcatchment 100: BASIN E

Runoff = 0.01 cfs @ 12.54 hrs, Volume= 203 cf, Depth= 0.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
5,648	39	>75% Grass cover, Good, HSG A
5,648		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	40	0.0500	0.05		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
0.2	35	0.2500	2.50		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.1	100	0.1000	1.58		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.9	82	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
15.7	257	Total			

Summary for Subcatchment 101: PT 4+50 R

Runoff = 0.37 cfs @ 12.04 hrs, Volume= 1,067 cf, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
2,208	39	>75% Grass cover, Good, HSG A
2,422	98	Paved parking, HSG A
4,630	70	Weighted Average
2,208		47.69% Pervious Area
2,422		52.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 102: PT 4+75 L

Runoff = 1.14 cfs @ 12.04 hrs, Volume= 3,564 cf, Depth= 1.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
3,487	39	>75% Grass cover, Good, HSG A
5,415	74	>75% Grass cover, Good, HSG C
3,426	98	Paved parking, HSG A
4,470	70	Woods, Good, HSG C
6,870	30	Woods, Good, HSG A
23,668	59	Weighted Average
20,242		85.52% Pervious Area
3,426		14.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 111: PT2+25 R

Runoff = 0.45 cfs @ 12.04 hrs, Volume= 1,309 cf, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
2,713	39	>75% Grass cover, Good, HSG A
2,965	98	Paved parking, HSG A
5,678	70	Weighted Average
2,713		47.78% Pervious Area
2,965		52.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 112: PT3+25 L

Runoff = 2.25 cfs @ 12.04 hrs, Volume= 6,464 cf, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
3,130	39	>75% Grass cover, Good, HSG A
6,460	74	>75% Grass cover, Good, HSG C
2,725	98	Paved parking, HSG A
4,285	98	Paved parking, HSG C
950	30	Woods, Good, HSG A
7,905	70	Woods, Good, HSG C
25,455	73	Weighted Average
18,445		72.46% Pervious Area
7,010		27.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	35	0.0280	0.16		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.2	40	0.2500	3.50		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.0	75	0.2600	1.27		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	65	0.2600	8.21		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	50	0.0800	5.74		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
5.1	265	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 113: PT 2+25 L

Runoff = 1.67 cfs @ 12.07 hrs, Volume= 5,584 cf, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
990	39	>75% Grass cover, Good, HSG A
7,695	74	>75% Grass cover, Good, HSG C
2,410	98	Paved parking, HSG A
2,630	98	Paved parking, HSG C
5,780	70	Woods, Good, HSG C
19,505	77	Weighted Average
14,465		74.16% Pervious Area
5,040		25.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	35	0.0280	0.16		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.3	60	0.2200	3.28		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
4.6	240	0.1200	0.87		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	50	0.2600	8.21		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	25	0.0800	5.74		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.8	410	Total			

Summary for Subcatchment 115: LCB IN SWALE

Runoff = 1.49 cfs @ 12.05 hrs, Volume= 4,598 cf, Depth= 2.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
4,775	39	>75% Grass cover, Good, HSG A
6,560	74	>75% Grass cover, Good, HSG C
2,820	98	Paved parking, HSG C
7,210	70	Woods, Good, HSG C
21,365	68	Weighted Average
18,545		86.80% Pervious Area
2,820		13.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	50	0.1000	0.19		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.17"
0.2	30	0.1200	2.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	110	0.1500	0.97		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.3	30	0.4000	1.58		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.2	30	0.2000	3.13		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
6.9	250	Total			

Summary for Subcatchment 201: PT 0+67 R

Runoff = 0.63 cfs @ 12.04 hrs, Volume= 1,808 cf, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
2,280	39	>75% Grass cover, Good, HSG A
4,035	98	Paved parking, HSG A
6,315	77	Weighted Average
2,280		36.10% Pervious Area
4,035		63.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 202: PT 0+67 L

Runoff = 2.40 cfs @ 12.05 hrs, Volume= 7,556 cf, Depth= 2.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
12,255	39	>75% Grass cover, Good, HSG A
5,850	74	>75% Grass cover, Good, HSG C
6,675	98	Paved parking, HSG A
1,600	98	Paved parking, HSG C
3,470	30	Woods, Good, HSG A
10,850	70	Woods, Good, HSG C
40,700	64	Weighted Average
32,425		79.67% Pervious Area
8,275		20.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	50	0.1000	0.19		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.17"
0.2	30	0.1200	2.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	110	0.1500	0.97		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.3	30	0.4000	1.58		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.2	30	0.2000	3.13		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
6.9	250	Total			

Summary for Subcatchment 300: Overland towards Salisbury

Runoff = 5.49 cfs @ 12.06 hrs, Volume= 17,338 cf, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
13,773	98		Unconnected roofs, HSG C
32,021	74		>75% Grass cover, Good, HSG C
18,430	70		Woods, Good, HSG C
64,224	78	75	Weighted Average, UI Adjusted
50,451			78.55% Pervious Area
13,773			21.45% Impervious Area
13,773			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	50	0.0400	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.17"
0.1	20	0.0250	3.21		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.8	66	0.0400	1.40		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.3	45	0.1300	2.52		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.0	20	0.5000	11.38		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.2	30	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
7.7	251	Total			

Summary for Subcatchment 301: Overland flows

Runoff = 1.32 cfs @ 12.16 hrs, Volume= 5,824 cf, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
10,790	74		>75% Grass cover, Good, HSG C
10,704	70		Woods, Good, HSG C
1,442	98		Unconnected roofs, HSG C
22,936	74	73	Weighted Average, UI Adjusted
21,494			93.71% Pervious Area
1,442			6.29% Impervious Area
1,442			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	50	0.0800	0.07		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
1.4	96	0.0520	1.14		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.6	140	0.0820	1.43		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
15.4	286	Total			

Summary for Subcatchment 310: Basin D-1

Runoff = 1.29 cfs @ 12.05 hrs, Volume= 3,844 cf, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
12,965	74		>75% Grass cover, Good, HSG C
1,275	98		Unconnected roofs, HSG C
14,240	76	75	Weighted Average, UI Adjusted
12,965			91.05% Pervious Area
1,275			8.95% Impervious Area
1,275			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	30	0.0100	0.10		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.1	30	0.3000	3.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.4	72	0.0140	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	30	0.1000	2.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
6.7	162	Total			

Summary for Subcatchment 320: Basin D-2

Runoff = 1.18 cfs @ 12.05 hrs, Volume= 3,499 cf, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
12,325	74	>75% Grass cover, Good, HSG C
635	98	Unconnected roofs, HSG C
12,960	75	Weighted Average
12,325		95.10% Pervious Area
635		4.90% Impervious Area
635		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	30	0.0100	0.10		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.1	30	0.3000	3.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.4	72	0.0140	0.83		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	30	0.1000	2.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
6.7	162	Total			

Summary for Subcatchment 321: PT 19+45 R

Runoff = 1.84 cfs @ 12.04 hrs, Volume= 5,478 cf, Depth= 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
9,491	74	>75% Grass cover, Good, HSG C
6,349	98	Paved roads w/curbs & sewers, HSG C
15,840	84	Weighted Average
9,491		59.92% Pervious Area
6,349		40.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	30	0.0100	0.10		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.4	30	0.0300	1.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.7	75	0.0660	1.80		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	100	0.0400	4.06		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
6.5	235	Total			

Summary for Subcatchment 322: PT 19+45L

Runoff = 0.91 cfs @ 12.04 hrs, Volume= 2,783 cf, Depth= 5.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
1,433	74	>75% Grass cover, Good, HSG C
5,072	98	Paved roads w/curbs & sewers, HSG C
6,505	93	Weighted Average
1,433		22.03% Pervious Area
5,072		77.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	295	0.0400	4.06		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.2	295	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 326: PT 21+35 R

Runoff = 2.01 cfs @ 12.04 hrs, Volume= 5,885 cf, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
7,470	74	>75% Grass cover, Good, HSG C
8,330	98	Paved roads w/curbs & sewers, HSG C
15,800	87	Weighted Average
7,470		47.28% Pervious Area
8,330		52.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	32	0.1560	0.31		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.17"
0.4	40	0.0500	1.57		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	18	0.2200	3.28		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.4	40	0.0600	1.71		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.6	125	0.0300	3.52		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.2	255	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 327: PT21+31 L

Runoff = 1.29 cfs @ 12.04 hrs, Volume= 3,990 cf, Depth= 5.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
1,422	74	>75% Grass cover, Good, HSG C
7,703	98	Paved roads w/curbs & sewers, HSG C
9,125	94	Weighted Average
1,422		15.58% Pervious Area
7,703		84.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	295	0.0400	4.06		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.2	295	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment 330: Basin D-3

Runoff = 0.65 cfs @ 12.04 hrs, Volume= 1,869 cf, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
7,135	74	>75% Grass cover, Good, HSG C
7,135		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, minimum**

Summary for Subcatchment 520: Overland to B-2

Runoff = 0.08 cfs @ 12.05 hrs, Volume= 424 cf, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
4,080	39	>75% Grass cover, Good, HSG A
1,930	61	>75% Grass cover, Good, HSG B
6,010	46	Weighted Average
6,010		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 525: H 0+95 R

Runoff = 1.29 cfs @ 12.04 hrs, Volume= 3,810 cf, Depth= 4.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
175	39	>75% Grass cover, Good, HSG A
2,070	61	>75% Grass cover, Good, HSG B
3,270	98	Paved parking, HSG A
4,240	98	Paved parking, HSG B
9,755	89	Weighted Average
2,245		23.01% Pervious Area
7,510		76.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 526: H 0+95 L

Runoff = 3.58 cfs @ 12.04 hrs, Volume= 10,273 cf, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
8,415	39	>75% Grass cover, Good, HSG A
10,883	61	>75% Grass cover, Good, HSG B
2,025	74	>75% Grass cover, Good, HSG C
7,115	98	Paved parking, HSG A
10,785	98	Paved parking, HSG B
39,223	74	Weighted Average
21,323		54.36% Pervious Area
17,900		45.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 530: Overland to Basin B-1

Runoff = 0.91 cfs @ 12.04 hrs, Volume= 2,982 cf, Depth= 1.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
9,645	39		>75% Grass cover, Good, HSG A
6,430	61		>75% Grass cover, Good, HSG B
2,850	74		>75% Grass cover, Good, HSG C
2,355	98		Unconnected roofs, HSG A
1,420	98		Unconnected roofs, HSG B
140	98		Unconnected roofs, HSG C
22,840	60	56	Weighted Average, UI Adjusted
18,925			82.86% Pervious Area
3,915			17.14% Impervious Area
3,915			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 532: H 3+50 L

Runoff = 3.90 cfs @ 12.04 hrs, Volume= 11,157 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
9,335	39	>75% Grass cover, Good, HSG A
13,900	74	>75% Grass cover, Good, HSG C
13,750	98	Paved parking, HSG A
3,135	98	Paved parking, HSG C
40,120	76	Weighted Average
23,235		57.91% Pervious Area
16,885		42.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 533: PT 4+75 R

Runoff = 1.36 cfs @ 12.04 hrs, Volume= 3,925 cf, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
7,985	39	>75% Grass cover, Good, HSG A
455	74	>75% Grass cover, Good, HSG C
8,168	98	Paved parking, HSG A
422	98	Paved parking, HSG C
17,030	70	Weighted Average
8,440		49.56% Pervious Area
8,590		50.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 700: BASIN A

Runoff = 0.98 cfs @ 12.14 hrs, Volume= 5,083 cf, Depth= 1.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
6,000	39		>75% Grass cover, Good, HSG A
37,676	49		50-75% Grass cover, Fair, HSG A
4,158	74		>75% Grass cover, Good, HSG C
3,186	98		Unconnected roofs, HSG A
230	30		Woods, Good, HSG A
51,250	53	51	Weighted Average, UI Adjusted
48,064			93.78% Pervious Area
3,186			6.22% Impervious Area
3,186			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	50	0.1400	0.08		**Sheet Flow,** Woods: Dense underbrush n= 0.800 P2= 3.17"
1.1	70	0.0430	1.04		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	35	0.5700	3.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	15	0.1300	1.80		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
1.1	60	0.0330	0.91		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
12.4	230	Total			

Summary for Subcatchment 711: PT 7+05 R

Runoff = 2.38 cfs @ 12.04 hrs, Volume= 7,628 cf, Depth> 5.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
785	74	>75% Grass cover, Good, HSG C
11,630	98	Paved parking, HSG C
3,950	98	Paved parking, HSG A
16,365	97	Weighted Average
785		4.80% Pervious Area
15,580		95.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 712: PT 7+05 L

Runoff = 2.02 cfs @ 12.04 hrs, Volume= 5,788 cf, Depth= 3.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
6,740	98	Paved parking, HSG C
3,887	70	Woods, Good, HSG C
7,000	74	>75% Grass cover, Good, HSG C
468	39	>75% Grass cover, Good, HSG A
18,095	81	Weighted Average
11,355		62.75% Pervious Area
6,740		37.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 714: PT 8+60 L

Runoff = 2.70 cfs @ 12.04 hrs, Volume= 7,873 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
10,877	74	>75% Grass cover, Good, HSG C
10,783	98	Paved parking, HSG C
21,660	86	Weighted Average
10,877		50.22% Pervious Area
10,783		49.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 715: PT 8+60 R

Runoff = 2.79 cfs @ 12.04 hrs, Volume= 8,303 cf, Depth= 4.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
6,672	74	>75% Grass cover, Good, HSG C
12,689	98	Paved parking, HSG C
1,409	98	Paved parking, HSG A
20,770	90	Weighted Average
6,672		32.12% Pervious Area
14,098		67.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 720: Basin C

Runoff = 1.77 cfs @ 12.04 hrs, Volume= 5,068 cf, Depth= 3.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
14,270	74	>75% Grass cover, Good, HSG C
2,935	98	Paved parking, HSG C
17,205	78	Weighted Average
14,270		82.94% Pervious Area
2,935		17.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 722: LCB C5

Runoff = 2.08 cfs @ 12.04 hrs, Volume= 6,246 cf, Depth= 4.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
4,370	74	>75% Grass cover, Good, HSG C
10,900	98	Paved parking, HSG C
15,270	91	Weighted Average
4,370		28.62% Pervious Area
10,900		71.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 732: PT 13+50L

Runoff = 1.12 cfs @ 12.04 hrs, Volume= 3,405 cf, Depth= 5.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
1,910	74	>75% Grass cover, Good, HSG C
6,230	98	Paved parking, HSG C
8,140	92	Weighted Average
1,910		23.46% Pervious Area
6,230		76.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 733: PT 13+50R

Runoff = 2.95 cfs @ 12.04 hrs, Volume= 8,597 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
11,405	74	>75% Grass cover, Good, HSG C
12,245	98	Paved parking, HSG C
23,650	86	Weighted Average
11,405		48.22% Pervious Area
12,245		51.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 737: PT 16+80 R

Runoff = 0.53 cfs @ 12.04 hrs, Volume= 1,564 cf, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
1,935	74	>75% Grass cover, Good, HSG C
2,265	98	Paved parking, HSG C
4,200	87	Weighted Average
1,935		46.07% Pervious Area
2,265		53.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 738: PT 17+18R

Runoff = 0.77 cfs @ 12.04 hrs, Volume= 2,248 cf, Depth= 4.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
2,692	74	>75% Grass cover, Good, HSG C
3,343	98	Paved parking, HSG C
6,035	87	Weighted Average
2,692		44.61% Pervious Area
3,343		55.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 752: PT 11+50R

Runoff = 0.92 cfs @ 12.04 hrs, Volume= 2,748 cf, Depth= 4.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
2,208	74	>75% Grass cover, Good, HSG C
4,667	98	Paved parking, HSG C
6,875	90	Weighted Average
2,208		32.12% Pervious Area
4,667		67.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 753: PT 11+50 L

Runoff = 1.73 cfs @ 12.04 hrs, Volume= 5,029 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
7,063	74	>75% Grass cover, Good, HSG C
6,772	98	Paved parking, HSG C
13,835	86	Weighted Average
7,063		51.05% Pervious Area
6,772		48.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 783: H 5+75 R

Runoff = 1.46 cfs @ 12.04 hrs, Volume= 4,347 cf, Depth= 4.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
3,566	74	>75% Grass cover, Good, HSG C
7,309	98	Paved parking, HSG C
10,875	90	Weighted Average
3,566		32.79% Pervious Area
7,309		67.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 784: H 5+75 L

Runoff = 2.65 cfs @ 12.04 hrs, Volume= 7,683 cf, Depth= 4.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
11,558	74	>75% Grass cover, Good, HSG C
10,107	98	Paved parking, HSG C
21,665	85	Weighted Average
11,558		53.35% Pervious Area
10,107		46.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 786: H 7+75 L

Runoff = 1.16 cfs @ 12.04 hrs, Volume= 3,322 cf, Depth= 3.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
7,975	74	>75% Grass cover, Good, HSG C
2,695	98	Paved parking, HSG C
10,670	80	Weighted Average
7,975		74.74% Pervious Area
2,695		25.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 787: H 7+75 R

Runoff = 2.65 cfs @ 12.04 hrs, Volume= 7,790 cf, Depth= 4.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
8,489	74	>75% Grass cover, Good, HSG C
11,931	98	Paved parking, HSG C
20,420	88	Weighted Average
8,489		41.57% Pervious Area
11,931		58.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 789: H 9+25 R

Runoff = 1.40 cfs @ 12.04 hrs, Volume= 4,063 cf, Depth= 4.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
6,951	74	>75% Grass cover, Good, HSG C
4,799	98	Paved parking, HSG C
11,750	84	Weighted Average
6,951		59.16% Pervious Area
4,799		40.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 790: H 9+25 L

Runoff = 1.31 cfs @ 12.04 hrs, Volume= 3,828 cf, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Description
5,444	74	>75% Grass cover, Good, HSG C
5,086	98	Paved parking, HSG C
10,530	86	Weighted Average
5,444		51.70% Pervious Area
5,086		48.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment 795: Overland LCB A-4

Runoff = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
MA-Holden_files 24-hr S1 25-yr Rainfall=5.95"

Area (sf)	CN	Adj	Description
29,155	74		>75% Grass cover, Good, HSG C
4,950	98		Unconnected roofs, HSG C
34,105	77	76	Weighted Average, UI Adjusted
29,155			85.49% Pervious Area
4,950			14.51% Impervious Area
4,950			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

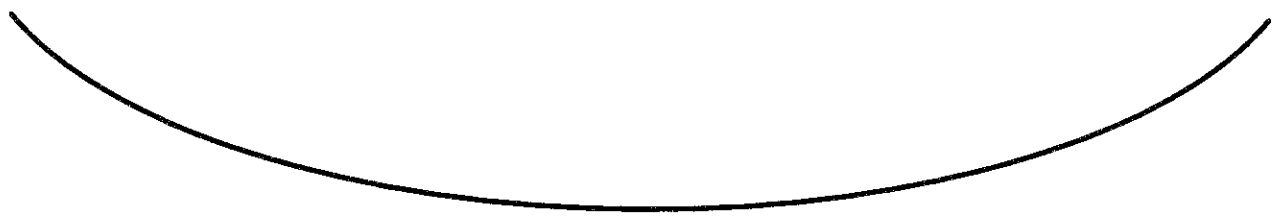
Summary for Reach 1R: overland flows

Inflow Area = 33,946 sf, 17.23% Impervious, Inflow Depth = 0.00" for 25-yr event
Inflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.10' Flow Area= 2.7 sf, Capacity= 2.21 cfs

40.00' x 0.10' deep Parabolic Channel, n= 0.130 Sheet flow over Range
Length= 200.0' Slope= 0.1950 '/'
Inlet Invert= 789.00', Outlet Invert= 750.00'



‡

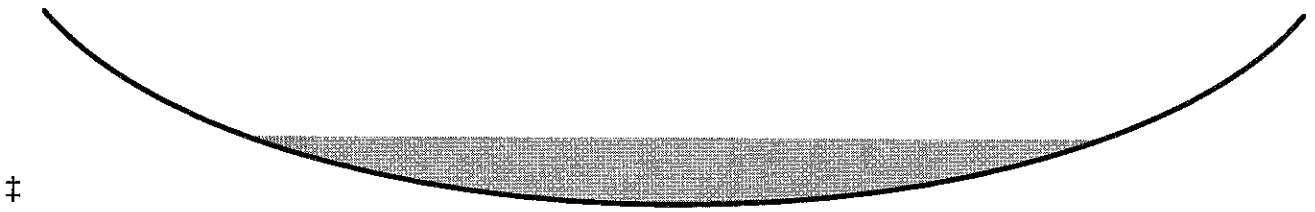
Summary for Reach 5R: overland to Abut Wetland

Inflow Area = 304,726 sf, 20.92% Impervious, Inflow Depth = 0.18" for 25-yr event
Inflow = 0.70 cfs @ 12.93 hrs, Volume= 4,675 cf
Outflow = 0.62 cfs @ 13.19 hrs, Volume= 4,674 cf, Atten= 11%, Lag= 15.2 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.18 fps, Min. Travel Time= 19.8 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 66.3 min

Peak Storage= 736 cf @ 13.19 hrs
Average Depth at Peak Storage= 0.17' , Surface Width= 29.50'
Bank-Full Depth= 0.50' Flow Area= 16.7 sf, Capacity= 6.09 cfs

50.00' x 0.50' deep Parabolic Channel, n= 0.400 Sheet flow: Woods+light brush
Length= 215.0' Slope= 0.0419 '/'
Inlet Invert= 777.00', Outlet Invert= 768.00'



‡

Summary for Pond 1P: DMH PT 9+85

Inflow Area = 106,620 sf, 50.05% Impervious, Inflow Depth = 4.37" for 25-yr event
Inflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf
Outflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 795.49' @ 12.05 hrs
Flood Elev= 809.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	793.60'	**36.0" Round Culvert** L= 43.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 793.60' / 793.17' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=12.66 cfs @ 12.04 hrs HW=795.47' TW=795.04' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 12.66 cfs @ 3.90 fps)

Summary for Pond 2P: DMH PT 9+45

Inflow Area = 106,620 sf, 50.05% Impervious, Inflow Depth = 4.37" for 25-yr event
Inflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf
Outflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 795.05' @ 12.04 hrs
Flood Elev= 807.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	793.17'	**36.0" Round Culvert** L= 43.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 793.17' / 792.74' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=12.81 cfs @ 12.04 hrs HW=795.04' TW=794.59' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 12.81 cfs @ 3.96 fps)

Summary for Pond 3P: DMH PT 9+05

Inflow Area = 106,620 sf, 50.05% Impervious, Inflow Depth = 4.37" for 25-yr event
Inflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf
Outflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 794.60' @ 12.04 hrs
Flood Elev= 805.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	792.74'	**36.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 792.74' / 792.42' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=13.05 cfs @ 12.04 hrs HW=794.59' TW=794.14' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 13.05 cfs @ 4.08 fps)

Summary for Pond 4P: DMH 21+48 Treatment

Inflow Area = 47,270 sf, 58.08% Impervious, Inflow Depth = 4.60" for 25-yr event
Inflow = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf
Outflow = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 817.94' @ 12.04 hrs
Flood Elev= 821.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	816.50'	**18.0" Round Culvert** L= 18.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.50' / 816.32' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.03 cfs @ 12.04 hrs HW=817.94' TW=813.07' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 6.03 cfs @ 4.44 fps)

Summary for Pond 5P: Bailey Wetlands

Inflow Area = 235,516 sf, 15.54% Impervious, Inflow Depth = 0.90" for 25-yr event
Inflow = 2.63 cfs @ 12.21 hrs, Volume= 17,644 cf
Outflow = 1.23 cfs @ 12.73 hrs, Volume= 17,643 cf, Atten= 53%, Lag= 31.4 min
Discarded = 0.38 cfs @ 12.89 hrs, Volume= 11,952 cf
Primary = 0.85 cfs @ 12.73 hrs, Volume= 5,691 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Peak Elev= 777.65' @ 12.89 hrs Surf.Area= 5,302 sf Storage= 3,972 cf

Plug-Flow detention time= 89.3 min calculated for 17,637 cf (100% of inflow)
Center-of-Mass det. time= 89.3 min (1,003.0 - 913.7)

Volume	Invert	Avail.Storage	Storage Description
#1	776.50'	5,972 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
776.50	777	0	0
777.00	3,545	1,081	1,081
777.50	4,918	2,116	3,196
778.00	6,184	2,776	5,972

Device	Routing	Invert	Outlet Devices
#1	Discarded	776.50'	**2.410 in/hr Exfiltration over Surface area above 776.50'** Conductivity to Groundwater Elevation = 775.50' Excluded Surface area = 777 sf
#2	Primary	777.00'	**12.0" Round Culvert X 3.00** L= 52.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 777.00' / 776.95' S= 0.0010 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf

Discarded OutFlow Max=0.38 cfs @ 12.89 hrs HW=777.65' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.38 cfs)

Primary OutFlow Max=0.81 cfs @ 12.73 hrs HW=777.64' TW=777.62' (Dynamic Tailwater)
↑—**2=Culvert** (Outlet Controls 0.81 cfs @ 0.73 fps)

Summary for Pond 7P: wetlands

Inflow Area = 432,235 sf, 33.92% Impervious, Inflow Depth = 0.14" for 25-yr event
Inflow = 0.50 cfs @ 12.19 hrs, Volume= 4,868 cf
Outflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 751.47' @ 24.70 hrs Surf.Area= 17,584 sf Storage= 4,868 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	751.19'	26,376 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
751.19	17,584	0	0
752.69	17,584	26,376	26,376

Device	Routing	Invert	Outlet Devices
#1	Primary	752.68'	**20.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=751.19' TW=0.00' (Dynamic Tailwater)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 53P: Basin B-3-(back 124 Bailey)

Inflow Area =	304,726 sf,	20.92% Impervious,	Inflow Depth =	0.82" for 25-yr event
Inflow =	4.95 cfs @	12.04 hrs, Volume=	20,782 cf	
Outflow =	1.17 cfs @	12.93 hrs, Volume=	20,785 cf,	Atten= 76%, Lag= 53.7 min
Discarded =	0.48 cfs @	12.93 hrs, Volume=	16,110 cf	
Primary =	0.70 cfs @	12.93 hrs, Volume=	4,675 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 777.64' @ 12.93 hrs Surf.Area= 6,094 sf Storage= 3,659 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 52.7 min (909.6 - 856.9)

Volume	Invert	Avail.Storage	Storage Description
#1	777.00'	5,971 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
777.00	5,470	0	0
777.50	5,890	2,840	2,840
778.00	6,635	3,131	5,971

Device	Routing	Invert	Outlet Devices
#1	Discarded	777.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 775.50'
#2	Primary	777.50'	**Asymmetrical Weir, C= 3.27** Offset (feet) -2.00 1.00 4.00 4.00 7.00 7.00 10.00 13.00 Height (feet) 1.00 0.65 0.65 0.00 0.00 0.65 0.65 1.00
#3	Primary	777.25'	**2.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#4	Primary	777.50'	**4.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.48 cfs @ 12.93 hrs HW=777.64' (Free Discharge)
└**1=Exfiltration** (Controls 0.48 cfs)

Primary OutFlow Max=0.70 cfs @ 12.93 hrs HW=777.64' TW=777.16' (Dynamic Tailwater)
├**2=Asymmetrical Weir** (Weir Controls 0.50 cfs @ 1.21 fps)
├**3=Orifice/Grate** (Orifice Controls 0.12 cfs @ 2.65 fps)
└**4=Orifice/Grate** (Orifice Controls 0.08 cfs @ 1.26 fps)

Summary for Pond 60P: Abutters Isolated wetland

Inflow Area = 314,660 sf, 20.25% Impervious, Inflow Depth = 0.19" for 25-yr event
Inflow = 0.63 cfs @ 13.19 hrs, Volume= 4,989 cf
Primary = 0.63 cfs @ 13.19 hrs, Volume= 4,989 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Summary for Pond 100P: Basin E

Inflow Area = 33,946 sf, 17.23% Impervious, Inflow Depth = 1.71" for 25-yr event
Inflow = 1.51 cfs @ 12.04 hrs, Volume= 4,834 cf
Outflow = 0.26 cfs @ 12.57 hrs, Volume= 4,834 cf, Atten= 83%, Lag= 32.0 min
Discarded = 0.26 cfs @ 12.57 hrs, Volume= 4,834 cf
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 788.83' @ 12.57 hrs Surf.Area= 1,110 sf Storage= 1,114 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 43.1 min (945.2 - 902.1)

Volume	Invert	Avail.Storage	Storage Description
#1	787.00'	2,857 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
787.00	158	0	0
788.00	625	392	392
789.00	1,208	917	1,308
790.00	1,890	1,549	2,857

Device	Routing	Invert	Outlet Devices
#1	Primary	789.30'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	787.00'	**8.240 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 783.00'

Discarded OutFlow Max=0.26 cfs @ 12.57 hrs HW=788.83' (Free Discharge)
↑**2=Exfiltration** (Controls 0.26 cfs)

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=787.00' TW=789.00' (Dynamic Tailwater)
↑**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 101P: PT4+50 R

Inflow Area = 4,630 sf, 52.31% Impervious, Inflow Depth = 2.77" for 25-yr event
Inflow = 0.37 cfs @ 12.04 hrs, Volume= 1,067 cf
Outflow = 0.37 cfs @ 12.04 hrs, Volume= 1,067 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.37 cfs @ 12.04 hrs, Volume= 1,067 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 789.83' @ 12.05 hrs
Flood Elev= 793.37'

Device	Routing	Invert	Outlet Devices
#1	Primary	789.37'	**12.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 789.37' / 789.18' S= 0.0173 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.35 cfs @ 12.04 hrs HW=789.82' TW=789.75' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 0.35 cfs @ 1.49 fps)

Summary for Pond 102P: PT4+75 L

Inflow Area = 23,668 sf, 14.48% Impervious, Inflow Depth = 1.81" for 25-yr event
Inflow = 1.14 cfs @ 12.04 hrs, Volume= 3,564 cf
Outflow = 1.14 cfs @ 12.04 hrs, Volume= 3,564 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.14 cfs @ 12.04 hrs, Volume= 3,564 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 790.04' @ 12.05 hrs
Flood Elev= 793.37'

Device	Routing	Invert	Outlet Devices
#1	Primary	789.37'	**12.0" Round Culvert** L= 21.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 789.37' / 789.16' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.13 cfs @ 12.04 hrs HW=790.03' TW=789.75' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.13 cfs @ 2.89 fps)

Summary for Pond 105P: DMH PT 4+60

Inflow Area = 28,298 sf, 20.67% Impervious, Inflow Depth = 1.96" for 25-yr event
Inflow = 1.51 cfs @ 12.04 hrs, Volume= 4,631 cf
Outflow = 1.51 cfs @ 12.04 hrs, Volume= 4,631 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.51 cfs @ 12.04 hrs, Volume= 4,631 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 789.75' @ 12.04 hrs
Flood Elev= 794.18'

Device	Routing	Invert	Outlet Devices
#1	Primary	789.16'	**15.0" Round Culvert** L= 39.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 789.16' / 788.00' S= 0.0297 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.51 cfs @ 12.04 hrs HW=789.75' TW=788.19' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 1.51 cfs @ 2.62 fps)

Summary for Pond 110P: Recharge Area

Inflow Area =	72,003 sf,	24.77% Impervious,	Inflow Depth =	2.99" for 25-yr event
Inflow =	5.75 cfs @	12.05 hrs, Volume=	17,954 cf	
Outflow =	2.02 cfs @	12.24 hrs, Volume=	17,954 cf,	Atten= 65%, Lag= 11.7 min
Discarded =	0.51 cfs @	12.24 hrs, Volume=	16,403 cf	
Primary =	1.51 cfs @	12.24 hrs, Volume=	1,552 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 770.68' @ 12.24 hrs Surf.Area= 1,734 sf Storage= 4,182 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 63.8 min (924.7 - 860.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	767.00'	1,688 cf	**35.75'W x 48.50'L x 4.00'H Field A** 6,936 cf Overall - 2,716 cf Embedded = 4,220 cf x 40.0% Voids
#2A	767.50'	2,716 cf	**Cultec R-360HD** x 72 Inside #1 Effective Size= 54.9"W x 36.0"H => 9.99 sf x 3.67'L = 36.6 cf Overall Size= 60.0"W x 36.0"H x 4.17'L with 0.50' Overlap 72 Chambers in 6 Rows Cap Storage= +6.5 cf x 2 x 6 rows = 77.5 cf
		4,404 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	767.00'	**8.270 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 760.00'
#2	Primary	767.00'	**12.0" Round Culvert** L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 767.00' / 766.00' S= 0.0130 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	770.50'	**6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 2.0' Crest Height

Discarded OutFlow Max=0.51 cfs @ 12.24 hrs HW=770.68' (Free Discharge)
└**1=Exfiltration** (Controls 0.51 cfs)

Primary OutFlow Max=1.50 cfs @ 12.24 hrs HW=770.68' TW=766.24' (Dynamic Tailwater)
└**2=Culvert** (Passes 1.50 cfs of 6.11 cfs potential flow)
└**3=Sharp-Crested Rectangular Weir** (Weir Controls 1.50 cfs @ 1.40 fps)

Summary for Pond 111P: PT2+25 R

Inflow Area = 5,678 sf, 52.22% Impervious, Inflow Depth = 2.77" for 25-yr event
Inflow = 0.45 cfs @ 12.04 hrs, Volume= 1,309 cf
Outflow = 0.45 cfs @ 12.04 hrs, Volume= 1,309 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.45 cfs @ 12.04 hrs, Volume= 1,309 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 772.23' @ 12.06 hrs
Flood Elev= 775.52'

Device	Routing	Invert	Outlet Devices
#1	Primary	771.52'	**12.0" Round Culvert** L= 19.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 771.52' / 771.06' S= 0.0242 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.23 cfs @ 12.04 hrs HW=772.20' TW=772.19' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.23 cfs @ 0.57 fps)

Summary for Pond 112P: DMH PT 3+25 L

Inflow Area = 25,455 sf, 27.54% Impervious, Inflow Depth = 3.05" for 25-yr event
Inflow = 2.25 cfs @ 12.04 hrs, Volume= 6,464 cf
Outflow = 2.25 cfs @ 12.04 hrs, Volume= 6,464 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.25 cfs @ 12.04 hrs, Volume= 6,464 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 780.09' @ 12.04 hrs
Flood Elev= 783.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	779.23'	**12.0" Round Culvert** L= 110.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 779.23' / 771.06' S= 0.0743 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.25 cfs @ 12.04 hrs HW=780.08' TW=772.19' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.25 cfs @ 3.15 fps)

Summary for Pond 113P: PT2+25 L

Inflow Area = 19,505 sf, 25.84% Impervious, Inflow Depth = 3.44" for 25-yr event
Inflow = 1.67 cfs @ 12.07 hrs, Volume= 5,584 cf
Outflow = 1.67 cfs @ 12.07 hrs, Volume= 5,584 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.67 cfs @ 12.07 hrs, Volume= 5,584 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 772.44' @ 12.06 hrs
Flood Elev= 775.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	771.55'	**12.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 771.55' / 771.12' S= 0.0391 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.77 cfs @ 12.07 hrs HW=772.43' TW=772.14' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 1.77 cfs @ 3.23 fps)

Summary for Pond 114P: DMH PT 2+15

Inflow Area =	50,638 sf,	29.65% Impervious,	Inflow Depth =	3.17"	for 25-yr event
Inflow =	4.25 cfs @	12.05 hrs, Volume=	13,356 cf		
Outflow =	4.25 cfs @	12.05 hrs, Volume=	13,356 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	4.25 cfs @	12.05 hrs, Volume=	13,356 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 772.20' @ 12.05 hrs
Flood Elev= 775.06'

Device	Routing	Invert	Outlet Devices
#1	Primary	771.06'	**15.0" Round Culvert** L= 59.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 771.06' / 769.88' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.25 cfs @ 12.05 hrs HW=772.19' TW=768.79' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 4.25 cfs @ 3.63 fps)

Summary for Pond 115P: LCB IN SWALE

Inflow Area =	21,365 sf,	13.20% Impervious,	Inflow Depth =	2.58"	for 25-yr event
Inflow =	1.49 cfs @	12.05 hrs, Volume=	4,598 cf		
Outflow =	1.49 cfs @	12.05 hrs, Volume=	4,598 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	1.49 cfs @	12.05 hrs, Volume=	4,598 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 770.70' @ 12.25 hrs
Flood Elev= 773.02'

Device	Routing	Invert	Outlet Devices
#1	Primary	769.20'	**12.0" Round Culvert** L= 5.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 769.20' / 769.20' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.49 cfs @ 12.05 hrs HW=770.04' TW=768.82' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 1.49 cfs @ 2.87 fps)

Summary for Pond 201P: PT0+67 RT

Inflow Area = 6,315 sf, 63.90% Impervious, Inflow Depth = 3.44" for 25-yr event
Inflow = 0.63 cfs @ 12.04 hrs, Volume= 1,808 cf
Outflow = 0.63 cfs @ 12.04 hrs, Volume= 1,808 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.63 cfs @ 12.04 hrs, Volume= 1,808 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 766.90' @ 12.04 hrs
Flood Elev= 770.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	766.50'	**12.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 766.50' / 766.04' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.63 cfs @ 12.04 hrs HW=766.90' TW=766.31' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 0.63 cfs @ 2.15 fps)

Summary for Pond 202P: PT 0+67 L

Inflow Area = 40,700 sf, 20.33% Impervious, Inflow Depth = 2.23" for 25-yr event
Inflow = 2.40 cfs @ 12.05 hrs, Volume= 7,556 cf
Outflow = 2.40 cfs @ 12.05 hrs, Volume= 7,556 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.40 cfs @ 12.05 hrs, Volume= 7,556 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 767.55' @ 12.05 hrs
Flood Elev= 770.59'

Device	Routing	Invert	Outlet Devices
#1	Primary	766.59'	**12.0" Round Culvert** L= 18.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 766.59' / 766.36' S= 0.0128 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.40 cfs @ 12.05 hrs HW=767.55' TW=766.31' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 2.40 cfs @ 3.95 fps)

Summary for Pond 203P: DMH PT 0+50

Inflow Area = 119,018 sf, 25.33% Impervious, Inflow Depth = 1.10" for 25-yr event
Inflow = 3.02 cfs @ 12.05 hrs, Volume= 10,916 cf
Outflow = 3.02 cfs @ 12.05 hrs, Volume= 10,916 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.02 cfs @ 12.05 hrs, Volume= 10,916 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 766.32' @ 12.05 hrs
Flood Elev= 770.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	765.50'	**18.0" Round Culvert** L= 55.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 765.50' / 764.62' S= 0.0160 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.01 cfs @ 12.05 hrs HW=766.31' TW=765.43' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 3.01 cfs @ 3.07 fps)

Summary for Pond 204P: DMH PT 0+24

Inflow Area =	119,018 sf,	25.33% Impervious,	Inflow Depth =	1.10" for 25-yr event
Inflow =	3.02 cfs @	12.05 hrs, Volume=	10,916 cf	
Outflow =	3.02 cfs @	12.05 hrs, Volume=	10,916 cf,	Atten= 0%, Lag= 0.0 min
Primary =	3.02 cfs @	12.05 hrs, Volume=	10,916 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 765.44' @ 12.05 hrs
Flood Elev= 771.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	764.62'	**18.0" Round Culvert** L= 74.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 764.62' / 763.14' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.01 cfs @ 12.05 hrs HW=765.43' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 3.01 cfs @ 3.07 fps)

Summary for Pond 310P: Basin D-1

Inflow Area =	14,240 sf,	8.95% Impervious,	Inflow Depth =	3.24" for 25-yr event
Inflow =	1.29 cfs @	12.05 hrs, Volume=	3,844 cf	
Outflow =	0.16 cfs @	12.66 hrs, Volume=	3,146 cf,	Atten= 88%, Lag= 36.7 min
Primary =	0.16 cfs @	12.66 hrs, Volume=	3,146 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 836.03' @ 12.66 hrs Surf.Area= 1,924 sf Storage= 1,640 cf

Plug-Flow detention time= 216.6 min calculated for 3,146 cf (82% of inflow)
Center-of-Mass det. time= 131.1 min (984.5 - 853.3)

Volume	Invert	Avail.Storage	Storage Description
#1	835.00'	7,970 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
835.00	1,350	0	0
836.00	1,825	1,588	1,588
837.00	5,350	3,588	5,175
837.50	5,830	2,795	7,970

Device	Routing	Invert	Outlet Devices
#1	Primary	836.50'	**15.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#2	Primary	830.00'	**6.0" Round Culvert** L= 68.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 830.00' / 820.00' S= 0.1471 '/' Cc= 0.900 n= 0.013, Flow Area= 0.20 sf
#3	Device 2	835.45'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.16 cfs @ 12.66 hrs HW=836.03' TW=817.91' (Dynamic Tailwater)
- **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)
- **2=Culvert** (Passes 0.16 cfs of 2.27 cfs potential flow)
  - **3=Orifice/Grate** (Orifice Controls 0.16 cfs @ 3.24 fps)

Summary for Pond 320P: Basin D-2

Inflow Area =	27,200 sf,	7.02% Impervious,	Inflow Depth >	2.93" for 25-yr event
Inflow =	1.26 cfs @	12.05 hrs, Volume=	6,645 cf	
Outflow =	0.03 cfs @	24.19 hrs, Volume=	1,385 cf,	Atten= 98%, Lag= 728.7 min
Discarded =	0.03 cfs @	24.19 hrs, Volume=	1,385 cf	
Primary =	0.00 cfs @	1.00 hrs, Volume=	0 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 819.11' @ 24.19 hrs Surf.Area= 3,353 sf Storage= 5,637 cf

Plug-Flow detention time= 625.7 min calculated for 1,385 cf (21% of inflow)
Center-of-Mass det. time= 399.5 min (1,314.9 - 915.4)

Volume	Invert	Avail.Storage	Storage Description
#1	817.00'	8,921 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
817.00	2,033	0	0
818.00	2,628	2,331	2,331
819.00	3,275	2,952	5,282
820.00	4,003	3,639	8,921

Device	Routing	Invert	Outlet Devices
#1	Primary	815.00'	**15.0" Round Culvert** L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 815.00' / 814.50' S= 0.0122 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	819.20'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	819.30'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#4	Discarded	817.00'	**0.520 in/hr Exfiltration over Surface area above 817.00'**

Conductivity to Groundwater Elevation = 815.90'
Excluded Surface area = 2,033 sf

Discarded OutFlow Max=0.03 cfs @ 24.19 hrs HW=819.11' (Free Discharge)
└**4=Exfiltration** (Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=817.00' TW=806.00' (Dynamic Tailwater)
├**1=Culvert** (Passes 0.00 cfs of 6.93 cfs potential flow)
│└**2=Orifice/Grate** (Controls 0.00 cfs)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 321P: PT 19+45 R

Inflow Area = 15,840 sf, 40.08% Impervious, Inflow Depth = 4.15" for 25-yr event
Inflow = 1.84 cfs @ 12.04 hrs, Volume= 5,478 cf
Outflow = 1.84 cfs @ 12.04 hrs, Volume= 5,478 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.84 cfs @ 12.04 hrs, Volume= 5,478 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 823.34' @ 12.04 hrs
Flood Elev= 826.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	822.60'	**12.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.60' / 822.12' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.83 cfs @ 12.04 hrs HW=823.34' TW=822.79' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 1.83 cfs @ 2.93 fps)

Summary for Pond 322P: PT 9+45 L

Inflow Area = 6,505 sf, 77.97% Impervious, Inflow Depth = 5.13" for 25-yr event
Inflow = 0.91 cfs @ 12.04 hrs, Volume= 2,783 cf
Outflow = 0.91 cfs @ 12.04 hrs, Volume= 2,783 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.91 cfs @ 12.04 hrs, Volume= 2,783 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 823.13' @ 12.04 hrs
Flood Elev= 826.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	822.60'	**12.0" Round Culvert** L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 822.60' / 822.12' S= 0.0218 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.87 cfs @ 12.04 hrs HW=823.13' TW=822.79' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 0.87 cfs @ 3.03 fps)

Summary for Pond 323P: DMH PT 19+55

Inflow Area = 22,345 sf, 51.11% Impervious, Inflow Depth = 4.44" for 25-yr event
Inflow = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf
Outflow = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 822.80' @ 12.04 hrs
Flood Elev= 826.38'

Device	Routing	Invert	Outlet Devices
#1	Primary	821.77'	**12.0" Round Culvert** L= 99.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 821.77' / 819.79' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.75 cfs @ 12.04 hrs HW=822.80' TW=820.82' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.75 cfs @ 3.50 fps)

Summary for Pond 324P: DMH PT20+45

Inflow Area = 22,345 sf, 51.11% Impervious, Inflow Depth = 4.44" for 25-yr event
Inflow = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf
Outflow = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.75 cfs @ 12.04 hrs, Volume= 8,260 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 820.82' @ 12.04 hrs
Flood Elev= 823.79'

Device	Routing	Invert	Outlet Devices
#1	Primary	819.79'	**12.0" Round Culvert** L= 93.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 819.79' / 817.75' S= 0.0219 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.75 cfs @ 12.04 hrs HW=820.82' TW=818.43' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.75 cfs @ 3.50 fps)

Summary for Pond 325P: DMH PT 21+48

Inflow Area = 47,270 sf, 58.08% Impervious, Inflow Depth = 4.60" for 25-yr event
Inflow = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf
Outflow = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.04 cfs @ 12.04 hrs, Volume= 18,135 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 818.44' @ 12.04 hrs
Flood Elev= 821.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	816.70'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 816.70' / 816.50' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.95 cfs @ 12.04 hrs HW=818.42' TW=817.94' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 5.95 cfs @ 3.37 fps)

Summary for Pond 326P: PT 21+35 R

Inflow Area = 15,800 sf, 52.72% Impervious, Inflow Depth = 4.47" for 25-yr event
Inflow = 2.01 cfs @ 12.04 hrs, Volume= 5,885 cf
Outflow = 2.01 cfs @ 12.04 hrs, Volume= 5,885 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.01 cfs @ 12.04 hrs, Volume= 5,885 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 818.70' @ 12.05 hrs
Flood Elev= 821.28'

Device	Routing	Invert	Outlet Devices
#1	Primary	817.28'	**12.0" Round Culvert** L= 13.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 817.28' / 817.00' S= 0.0215 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.79 cfs @ 12.04 hrs HW=818.64' TW=818.42' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 1.79 cfs @ 2.28 fps)

Summary for Pond 327P: PT 21+31L

Inflow Area = 9,125 sf, 84.42% Impervious, Inflow Depth = 5.25" for 25-yr event
Inflow = 1.29 cfs @ 12.04 hrs, Volume= 3,990 cf
Outflow = 1.29 cfs @ 12.04 hrs, Volume= 3,990 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.29 cfs @ 12.04 hrs, Volume= 3,990 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 818.56' @ 12.05 hrs
Flood Elev= 821.34'

Device	Routing	Invert	Outlet Devices
#1	Primary	817.34'	**12.0" Round Culvert** L= 55.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 817.34' / 817.07' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.97 cfs @ 12.04 hrs HW=818.50' TW=818.42' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 0.97 cfs @ 1.34 fps)

Summary for Pond 330-A: Level Spreader

Inflow Area =	81,605 sf, 35.98% Impervious,	Inflow Depth =	1.07"	for 25-yr event
Inflow =	1.45 cfs @ 12.26 hrs, Volume=	7,259 cf		
Outflow =	1.47 cfs @ 12.21 hrs, Volume=	7,242 cf,	Atten= 0%,	Lag= 0.0 min
Discarded =	0.00 cfs @ 12.21 hrs, Volume=	257 cf		
Primary =	1.47 cfs @ 12.21 hrs, Volume=	6,985 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 806.05' @ 12.21 hrs Surf.Area= 120 sf Storage= 188 cf

Plug-Flow detention time= 16.2 min calculated for 7,239 cf (100% of inflow)
Center-of-Mass det. time= 15.9 min (798.1 - 782.2)

Volume	Invert	Avail.Storage	Storage Description
#1	803.00'	139 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 420 cf Overall - 72 cf Embedded = 348 cf x 40.0% Voids
#2	803.50'	71 cf	**18.0" Round Pipe Storage** Inside #1 L= 40.0' S= 0.0001 '/' 72 cf Overall - 0.1" Wall Thickness = 71 cf
		210 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
803.00	120	0	0
806.50	120	420	420

Device	Routing	Invert	Outlet Devices
#1	Primary	806.00'	**40.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height
#2	Discarded	803.00'	**1.020 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 798.00'

Discarded OutFlow Max=0.00 cfs @ 12.21 hrs HW=806.05' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=1.46 cfs @ 12.21 hrs HW=806.05' TW=0.00' (Dynamic Tailwater)
↑—**1=Sharp-Crested Rectangular Weir** (Weir Controls 1.46 cfs @ 0.74 fps)

Summary for Pond 330P: Basin D-3

Inflow Area =	81,605 sf, 35.98% Impervious,	Inflow Depth =	2.94"	for 25-yr event
Inflow =	6.70 cfs @ 12.04 hrs, Volume=	20,004 cf		
Outflow =	1.73 cfs @ 12.26 hrs, Volume=	19,774 cf,	Atten= 74%,	Lag= 13.2 min
Discarded =	0.29 cfs @ 12.26 hrs, Volume=	12,515 cf		
Primary =	1.45 cfs @ 12.26 hrs, Volume=	7,259 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 813.75' @ 12.26 hrs Surf.Area= 5,549 sf Storage= 6,678 cf

Plug-Flow detention time= 148.1 min calculated for 19,774 cf (99% of inflow)

Center-of-Mass det. time= 140.9 min (947.3 - 806.4)

Volume	Invert	Avail.Storage	Storage Description
#1	811.00'	8,484 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)
#2	806.00'	2,047 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 6,823 cf Overall x 30.0% Voids
		10,531 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
811.00	908	0	0
812.00	1,435	1,172	1,172
813.00	2,006	1,721	2,892
814.00	2,798	2,402	5,294
815.00	3,582	3,190	8,484

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
806.00	150	0	0
807.00	500	325	325
808.00	1,005	753	1,078
809.00	1,560	1,283	2,360
810.00	2,210	1,885	4,245
811.00	2,945	2,578	6,823

Device	Routing	Invert	Outlet Devices
#1	Primary	808.50'	**15.0" Round Culvert** L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.50' / 807.90' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	811.90'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	812.25'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	812.75'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	813.45'	**30.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.61 (C= 3.26)
#6	Device 1	814.30'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#7	Primary	814.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#8	Discarded	806.00'	**1.020 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 805.00'

Discarded OutFlow Max=0.29 cfs @ 12.26 hrs HW=813.75' (Free Discharge)
└**8=Exfiltration** (Controls 0.29 cfs)

Primary OutFlow Max=1.45 cfs @ 12.26 hrs HW=813.75' TW=806.05' (Dynamic Tailwater)
├**1=Culvert** (Passes 1.45 cfs of 12.41 cfs potential flow)
│ ├**2=Orifice/Grate** (Orifice Controls 0.55 cfs @ 6.26 fps)
│ ├**3=Orifice/Grate** (Orifice Controls 0.28 cfs @ 5.66 fps)
│ ├**4=Orifice/Grate** (Orifice Controls 0.59 cfs @ 4.30 fps)
│ ├**5=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.04 cfs @ 1.44 fps)
│ └**6=Orifice/Grate** (Controls 0.00 cfs)
└**7=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 520P: Lower Basin B-2

Inflow Area = 86,000 sf, 34.17% Impervious, Inflow Depth = 2.10" for 25-yr event
Inflow = 5.87 cfs @ 12.06 hrs, Volume= 15,018 cf
Outflow = 2.45 cfs @ 12.20 hrs, Volume= 15,018 cf, Atten= 58%, Lag= 8.2 min
Discarded = 0.19 cfs @ 12.20 hrs, Volume= 6,327 cf
Primary = 2.26 cfs @ 12.20 hrs, Volume= 8,692 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 780.36' @ 12.20 hrs Surf.Area= 2,142 sf Storage= 3,351 cf

Plug-Flow detention time= 83.1 min calculated for 15,013 cf (100% of inflow)
Center-of-Mass det. time= 83.1 min (946.1 - 862.9)

Volume	Invert	Avail.Storage	Storage Description
#1	778.00'	4,848 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
778.00	780	0	0
779.00	1,275	1,028	1,028
780.00	1,900	1,588	2,615
781.00	2,565	2,233	4,848

Device	Routing	Invert	Outlet Devices
#1	Discarded	778.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 775.50'
#2	Primary	778.00'	**12.0" Round Culvert** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 778.00' / 777.70' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	779.00'	**3.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#4	Device 2	780.20'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Primary	780.50'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=0.19 cfs @ 12.20 hrs HW=780.36' (Free Discharge)
└**1=Exfiltration** (Controls 0.19 cfs)

Primary OutFlow Max=2.26 cfs @ 12.20 hrs HW=780.36' TW=776.87' (Dynamic Tailwater)
├**2=Culvert** (Passes 2.26 cfs of 5.16 cfs potential flow)
│ ├**3=Orifice/Grate** (Orifice Controls 0.53 cfs @ 5.36 fps)
│ └**4=Orifice/Grate** (Weir Controls 1.73 cfs @ 1.32 fps)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 525P: H 0+95 R

Inflow Area =	9,755 sf, 76.99% Impervious,	Inflow Depth =	4.69"	for 25-yr event
Inflow =	1.29 cfs @ 12.04 hrs, Volume=	3,810 cf		
Outflow =	1.29 cfs @ 12.04 hrs, Volume=	3,810 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	1.29 cfs @ 12.04 hrs, Volume=	3,810 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 779.37' @ 12.05 hrs
Flood Elev= 782.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	778.26'	**12.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 778.26' / 777.84' S= 0.0420 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.71 cfs @ 12.04 hrs HW=779.27' TW=779.24' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 0.71 cfs @ 0.90 fps)

Summary for Pond 526P: H 0+95 R

Inflow Area =	39,223 sf, 45.64% Impervious,	Inflow Depth =	3.14"	for 25-yr event
Inflow =	3.58 cfs @ 12.04 hrs, Volume=	10,273 cf		
Outflow =	3.58 cfs @ 12.04 hrs, Volume=	10,273 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	3.58 cfs @ 12.04 hrs, Volume=	10,273 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 779.61' @ 12.05 hrs
Flood Elev= 782.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	778.26'	**15.0" Round Culvert** L= 21.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 778.26' / 777.84' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.25 cfs @ 12.04 hrs HW=779.55' TW=779.25' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 3.25 cfs @ 2.65 fps)

Summary for Pond 527P: DMH H 1+05

Inflow Area =	48,978 sf,	51.88% Impervious,	Inflow Depth =	3.45" for 25-yr event
Inflow =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf	
Outflow =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf,	Atten= 0%, Lag= 0.0 min
Primary =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 779.26' @ 12.04 hrs
Flood Elev= 782.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	777.59'	**15.0" Round Culvert** L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 777.59' / 777.31' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.79 cfs @ 12.04 hrs HW=779.25' TW=778.59' (Dynamic Tailwater)
1=Culvert (Inlet Controls 4.79 cfs @ 3.90 fps)

Summary for Pond 528P: H 1+10 Stormwater Unit

Inflow Area =	48,978 sf,	51.88% Impervious,	Inflow Depth =	3.45" for 25-yr event
Inflow =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf	
Outflow =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf,	Atten= 0%, Lag= 0.0 min
Primary =	4.87 cfs @	12.04 hrs, Volume=	14,083 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 778.59' @ 12.04 hrs
Flood Elev= 781.88'

Device	Routing	Invert	Outlet Devices
#1	Primary	777.29'	**15.0" Round Culvert** L= 18.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 777.29' / 776.93' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.86 cfs @ 12.04 hrs HW=778.59' TW=777.31' (Dynamic Tailwater)
1=Culvert (Inlet Controls 4.86 cfs @ 3.96 fps)

Summary for Pond 530P: Upper Basin B-1

Inflow Area =	79,990 sf,	36.74% Impervious,	Inflow Depth =	2.71" for 25-yr event
Inflow =	6.17 cfs @	12.04 hrs, Volume=	18,064 cf	
Outflow =	5.88 cfs @	12.06 hrs, Volume=	18,064 cf,	Atten= 5%, Lag= 1.1 min
Discarded =	0.10 cfs @	12.06 hrs, Volume=	3,469 cf	
Primary =	5.78 cfs @	12.06 hrs, Volume=	14,595 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Peak Elev= 785.75' @ 12.06 hrs Surf.Area= 1,489 sf Storage= 1,726 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 26.0 min (890.6 - 864.6)

Volume	Invert	Avail.Storage	Storage Description
#1	784.00'	2,113 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
784.00	525	0	0
785.00	1,030	778	778
786.00	1,640	1,335	2,113

Device	Routing	Invert	Outlet Devices
#1	Discarded	784.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 778.00'
#2	Primary	782.00'	**15.0" Round Culvert** L= 34.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 782.00' / 780.00' S= 0.0588 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#3	Device 2	785.60'	**47.0" x 47.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	785.65'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Device 2	784.50'	**6.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.10 cfs @ 12.06 hrs HW=785.75' (Free Discharge)
└**1=Exfiltration** (Controls 0.10 cfs)

Primary OutFlow Max=5.76 cfs @ 12.06 hrs HW=785.75' TW=779.69' (Dynamic Tailwater)
├**2=Culvert** (Passes 4.94 cfs of 8.25 cfs potential flow)
│ ├**3=Orifice/Grate** (Weir Controls 3.05 cfs @ 1.28 fps)
│ └**5=Orifice/Grate** (Orifice Controls 1.89 cfs @ 4.82 fps)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 0.82 cfs @ 0.80 fps)

Summary for Pond 531P: DMH H 3+40

Inflow Area =	57,150 sf, 44.58% Impervious,	Inflow Depth =	3.17"	for 25-yr event
Inflow =	5.26 cfs @ 12.04 hrs, Volume=	15,082 cf		
Outflow =	5.26 cfs @ 12.04 hrs, Volume=	15,082 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	5.26 cfs @ 12.04 hrs, Volume=	15,082 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 787.92' @ 12.04 hrs
Flood Elev= 791.39'

Device	Routing	Invert	Outlet Devices
#1	Primary	786.50'	**15.0" Round Culvert**

L= 34.0' CPP, square edge headwall, Ke= 0.500
Inlet / Outlet Invert= 786.50' / 785.48' S= 0.0300 '/' Cc= 0.900
n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.25 cfs @ 12.04 hrs HW=787.91' TW=786.89' (Dynamic Tailwater)
1=Culvert (Inlet Controls 5.25 cfs @ 4.28 fps)

Summary for Pond 532P: H 3+50 L

Inflow Area =	40,120 sf,	42.09% Impervious,	Inflow Depth =	3.34" for 25-yr event
Inflow =	3.90 cfs @	12.04 hrs, Volume=	11,157 cf	
Outflow =	3.90 cfs @	12.04 hrs, Volume=	11,157 cf,	Atten= 0%, Lag= 0.0 min
Primary =	3.90 cfs @	12.04 hrs, Volume=	11,157 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 788.53' @ 12.04 hrs
Flood Elev= 791.71'

Device	Routing	Invert	Outlet Devices
#1	Primary	787.46'	**15.0" Round Culvert**
			L= 18.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 787.46' / 786.75' S= 0.0394 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.83 cfs @ 12.04 hrs HW=788.53' TW=787.91' (Dynamic Tailwater)
1=Culvert (Outlet Controls 3.83 cfs @ 4.62 fps)

Summary for Pond 533P: H 3+50 R

Inflow Area =	17,030 sf,	50.44% Impervious,	Inflow Depth =	2.77" for 25-yr event
Inflow =	1.36 cfs @	12.04 hrs, Volume=	3,925 cf	
Outflow =	1.36 cfs @	12.04 hrs, Volume=	3,925 cf,	Atten= 0%, Lag= 0.0 min
Primary =	1.36 cfs @	12.04 hrs, Volume=	3,925 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 788.19' @ 12.05 hrs
Flood Elev= 791.71'

Device	Routing	Invert	Outlet Devices
#1	Primary	787.46'	**12.0" Round Culvert**
			L= 12.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 787.46' / 786.75' S= 0.0592 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.31 cfs @ 12.04 hrs HW=788.18' TW=787.91' (Dynamic Tailwater)
1=Culvert (Outlet Controls 1.31 cfs @ 3.03 fps)

Summary for Pond 534P: DMH H 3+10 Stormwater Unit

Inflow Area = 57,150 sf, 44.58% Impervious, Inflow Depth = 3.17" for 25-yr event
Inflow = 5.26 cfs @ 12.04 hrs, Volume= 15,082 cf
Outflow = 5.26 cfs @ 12.04 hrs, Volume= 15,082 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.26 cfs @ 12.04 hrs, Volume= 15,082 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 786.90' @ 12.04 hrs
Flood Elev= 790.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	785.48'	**15.0" Round Culvert** L= 43.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 785.48' / 784.00' S= 0.0344 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.25 cfs @ 12.04 hrs HW=786.89' TW=785.73' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 5.25 cfs @ 4.28 fps)

Summary for Pond 700P: Basin A

Inflow Area = 343,365 sf, 42.70% Impervious, Inflow Depth > 3.77" for 25-yr event
Inflow = 35.05 cfs @ 12.04 hrs, Volume= 107,884 cf
Outflow = 1.58 cfs @ 14.67 hrs, Volume= 98,003 cf, Atten= 96%, Lag= 157.7 min
Discarded = 1.58 cfs @ 14.67 hrs, Volume= 98,003 cf
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 788.10' @ 14.67 hrs Surf.Area= 20,082 sf Storage= 51,515 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 319.1 min (1,155.7 - 836.6)

Volume	Invert	Avail.Storage	Storage Description
#1	784.00'	93,964 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
784.00	5,190	342.0	0	0	5,190
785.50	5,190	525.0	7,785	7,785	17,833
786.00	16,710	738.0	5,202	12,987	39,243
788.00	19,850	761.0	36,515	49,502	42,369
790.00	24,700	796.0	44,462	93,964	46,977

Device	Routing	Invert	Outlet Devices
#1	Discarded	784.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 778.70'
#2	Primary	789.30'	**40.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=1.58 cfs @ 14.67 hrs HW=788.10' (Free Discharge)
↑**1=Exfiltration** (Controls 1.58 cfs)

Primary OutFlow Max=0.00 cfs @ 1.00 hrs HW=784.00' TW=751.19' (Dynamic Tailwater)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 701P: DMH A-1

Inflow Area =	34,105 sf,	14.51% Impervious,	Inflow Depth =	3.34" for 25-yr event
Inflow =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf	
Outflow =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf,	Atten= 0%, Lag= 0.0 min
Primary =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 793.70' @ 12.04 hrs
Flood Elev= 797.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	792.75'	**15.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 792.75' / 785.50' S= 0.1450 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.31 cfs @ 12.04 hrs HW=793.70' TW=786.63' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 3.31 cfs @ 3.31 fps)

Summary for Pond 702P: DMH A-2

Inflow Area =	34,105 sf,	14.51% Impervious,	Inflow Depth =	3.34" for 25-yr event
Inflow =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf	
Outflow =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf,	Atten= 0%, Lag= 0.0 min
Primary =	3.31 cfs @	12.04 hrs, Volume=	9,484 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 805.65' @ 12.04 hrs
Flood Elev= 812.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	804.70'	**15.0" Round Culvert** L= 168.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 804.70' / 792.75' S= 0.0711 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.31 cfs @ 12.04 hrs HW=805.65' TW=793.70' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 3.31 cfs @ 3.31 fps)

Summary for Pond 710P: DMH PT 7+15

Inflow Area = 34,460 sf, 64.77% Impervious, Inflow Depth > 4.67" for 25-yr event
Inflow = 4.39 cfs @ 12.04 hrs, Volume= 13,415 cf
Outflow = 4.39 cfs @ 12.04 hrs, Volume= 13,415 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.39 cfs @ 12.04 hrs, Volume= 13,415 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 797.17' @ 12.04 hrs
Flood Elev= 800.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	796.00'	**15.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 796.00' / 795.20' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.38 cfs @ 12.04 hrs HW=797.17' TW=794.67' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 4.38 cfs @ 3.68 fps)

Summary for Pond 711P: DMH PT 7+05 R

Inflow Area = 16,365 sf, 95.20% Impervious, Inflow Depth > 5.59" for 25-yr event
Inflow = 2.38 cfs @ 12.04 hrs, Volume= 7,628 cf
Outflow = 2.38 cfs @ 12.04 hrs, Volume= 7,628 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.38 cfs @ 12.04 hrs, Volume= 7,628 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 797.56' @ 12.04 hrs
Flood Elev= 800.28'

Device	Routing	Invert	Outlet Devices
#1	Primary	796.28'	**12.0" Round Culvert** L= 11.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 796.28' / 796.07' S= 0.0191 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.32 cfs @ 12.04 hrs HW=797.54' TW=797.17' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.32 cfs @ 2.96 fps)

Summary for Pond 712P: PT 7+05 L

Inflow Area = 18,095 sf, 37.25% Impervious, Inflow Depth = 3.84" for 25-yr event
Inflow = 2.02 cfs @ 12.04 hrs, Volume= 5,788 cf
Outflow = 2.02 cfs @ 12.04 hrs, Volume= 5,788 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.02 cfs @ 12.04 hrs, Volume= 5,788 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 797.45' @ 12.04 hrs
Flood Elev= 800.28'

Device	Routing	Invert	Outlet Devices
#1	Primary	796.28'	**12.0" Round Culvert** L= 21.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 796.28' / 796.07' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.97 cfs @ 12.04 hrs HW=797.44' TW=797.17' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 1.97 cfs @ 2.51 fps)

Summary for Pond 713P: DMH PT8+75

Inflow Area =	149,050 sf,	52.50% Impervious,	Inflow Depth = 4.43"	for 25-yr event
Inflow =	18.76 cfs @	12.04 hrs, Volume=	54,987 cf	
Outflow =	18.76 cfs @	12.04 hrs, Volume=	54,987 cf,	Atten= 0%, Lag= 0.0 min
Primary =	18.76 cfs @	12.04 hrs, Volume=	54,987 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 794.14' @ 12.04 hrs
Flood Elev= 804.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	792.42'	**36.0" Round Culvert** L= 129.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 792.42' / 788.00' S= 0.0343 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=18.70 cfs @ 12.04 hrs HW=794.14' TW=786.61' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 18.70 cfs @ 4.46 fps)

Summary for Pond 714P: PT 8+60 L

Inflow Area =	21,660 sf,	49.78% Impervious,	Inflow Depth = 4.36"	for 25-yr event
Inflow =	2.70 cfs @	12.04 hrs, Volume=	7,873 cf	
Outflow =	2.70 cfs @	12.04 hrs, Volume=	7,873 cf,	Atten= 0%, Lag= 0.0 min
Primary =	2.70 cfs @	12.04 hrs, Volume=	7,873 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 798.31' @ 12.04 hrs
Flood Elev= 804.08'

Device	Routing	Invert	Outlet Devices
#1	Primary	797.30'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 797.30' / 796.85' S= 0.0281 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.69 cfs @ 12.04 hrs HW=798.31' TW=794.14' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.69 cfs @ 3.43 fps)

Summary for Pond 715P: PT 8+60 R

Inflow Area = 20,770 sf, 67.88% Impervious, Inflow Depth = 4.80" for 25-yr event
Inflow = 2.79 cfs @ 12.04 hrs, Volume= 8,303 cf
Outflow = 2.79 cfs @ 12.04 hrs, Volume= 8,303 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.79 cfs @ 12.04 hrs, Volume= 8,303 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 801.12' @ 12.04 hrs
Flood Elev= 804.08'

Device	Routing	Invert	Outlet Devices
#1	Primary	800.08'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 800.08' / 799.56' S= 0.0325 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.78 cfs @ 12.04 hrs HW=801.12' TW=794.14' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.78 cfs @ 3.53 fps)

Summary for Pond 720P: Basin C

Inflow Area = 59,230 sf, 45.62% Impervious, Inflow Depth = 4.23" for 25-yr event
Inflow = 7.15 cfs @ 12.04 hrs, Volume= 20,882 cf
Outflow = 6.43 cfs @ 12.06 hrs, Volume= 18,670 cf, Atten= 10%, Lag= 1.6 min
Primary = 6.43 cfs @ 12.06 hrs, Volume= 18,670 cf
Secondary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 818.88' @ 12.06 hrs Surf.Area= 2,711 sf Storage= 5,207 cf

Plug-Flow detention time= 170.7 min calculated for 18,663 cf (89% of inflow)
Center-of-Mass det. time= 113.9 min (929.4 - 815.5)

Volume	Invert	Avail.Storage	Storage Description
#1	816.00'	8,693 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
816.00	1,027	0	0
818.00	2,072	3,099	3,099
820.00	3,522	5,594	8,693

Device	Routing	Invert	Outlet Devices
#1	Secondary	819.30'	**15.0' long x 15.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Primary	814.50'	**12.0" Round Culvert** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 814.50' / 814.00' S= 0.0167 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

#3	Device 2	817.50'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 2	818.50'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.41 cfs @ 12.06 hrs HW=818.88' TW=815.87' (Dynamic Tailwater)
↑—**2=Culvert** (Passes 6.41 cfs of 6.56 cfs potential flow)
↑—**3=Orifice/Grate** (Orifice Controls 0.26 cfs @ 5.40 fps)
—**4=Orifice/Grate** (Weir Controls 6.15 cfs @ 2.02 fps)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=816.00' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 721P: DMH C-3

Inflow Area =	59,230 sf,	45.62% Impervious,	Inflow Depth >	3.78" for 25-yr event
Inflow =	6.43 cfs @	12.06 hrs, Volume=	18,670 cf	
Outflow =	6.43 cfs @	12.06 hrs, Volume=	18,670 cf,	Atten= 0%, Lag= 0.0 min
Primary =	6.43 cfs @	12.06 hrs, Volume=	18,670 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 815.88' @ 12.06 hrs
Flood Elev= 818.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	814.00'	**15.0" Round Culvert** L= 103.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 814.00' / 812.97' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.41 cfs @ 12.06 hrs HW=815.87' TW=812.58' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 6.41 cfs @ 5.23 fps)

Summary for Pond 722P: LCB C5

Inflow Area =	15,270 sf,	71.38% Impervious,	Inflow Depth =	4.91" for 25-yr event
Inflow =	2.08 cfs @	12.04 hrs, Volume=	6,246 cf	
Outflow =	2.08 cfs @	12.04 hrs, Volume=	6,246 cf,	Atten= 0%, Lag= 0.0 min
Primary =	2.08 cfs @	12.04 hrs, Volume=	6,246 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 814.81' @ 12.04 hrs
Flood Elev= 819.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	814.00'	**12.0" Round 812** L= 17.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 814.00' / 813.00' S= 0.0588 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.07 cfs @ 12.04 hrs HW=814.81' TW=812.41' (Dynamic Tailwater)
↑—**1=812** (Inlet Controls 2.07 cfs @ 3.06 fps)

Summary for Pond 723P: DMH C4

Inflow Area = 74,500 sf, 50.90% Impervious, Inflow Depth > 4.01" for 25-yr event
Inflow = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf
Outflow = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 812.62' @ 12.06 hrs
Flood Elev= 817.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	810.00'	**15.0" Round Culvert** L= 173.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 810.00' / 798.75' S= 0.0650 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=8.32 cfs @ 12.06 hrs HW=812.61' TW=799.71' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 8.32 cfs @ 6.78 fps)

Summary for Pond 724P: DMH PT 8+12

Inflow Area = 74,500 sf, 50.90% Impervious, Inflow Depth > 4.01" for 25-yr event
Inflow = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf
Outflow = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.34 cfs @ 12.06 hrs, Volume= 24,915 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 799.71' @ 12.06 hrs
Flood Elev= 803.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	798.00'	**18.0" Round Culvert** L= 48.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 798.00' / 794.00' S= 0.0833 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=8.32 cfs @ 12.06 hrs HW=799.71' TW=794.68' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 8.32 cfs @ 4.71 fps)

Summary for Pond 725P: DMH PT 7+90

Inflow Area = 108,960 sf, 55.28% Impervious, Inflow Depth > 4.22" for 25-yr event
Inflow = 12.58 cfs @ 12.05 hrs, Volume= 38,331 cf
Outflow = 12.58 cfs @ 12.05 hrs, Volume= 38,331 cf, Atten= 0%, Lag= 0.0 min
Primary = 12.58 cfs @ 12.05 hrs, Volume= 38,331 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 794.69' @ 12.05 hrs
Flood Elev= 801.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	793.00'	**24.0" Round Culvert** L= 102.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 793.00' / 788.00' S= 0.0490 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=12.56 cfs @ 12.05 hrs HW=794.69' TW=786.70' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 12.56 cfs @ 4.43 fps)

Summary for Pond 731: DMH PT 13+40

Inflow Area = 42,025 sf, 57.31% Impervious, Inflow Depth = 4.52" for 25-yr event
Inflow = 5.38 cfs @ 12.04 hrs, Volume= 15,814 cf
Outflow = 5.38 cfs @ 12.04 hrs, Volume= 15,814 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.38 cfs @ 12.04 hrs, Volume= 15,814 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 824.70' @ 12.04 hrs
Flood Elev= 827.54'

Device	Routing	Invert	Outlet Devices
#1	Primary	823.25'	**15.0" Round Culvert** L= 54.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 823.25' / 822.00' S= 0.0231 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.36 cfs @ 12.04 hrs HW=824.70' TW=818.86' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 5.36 cfs @ 4.37 fps)

Summary for Pond 732P: PT 13+50 L

Inflow Area = 8,140 sf, 76.54% Impervious, Inflow Depth = 5.02" for 25-yr event
Inflow = 1.12 cfs @ 12.04 hrs, Volume= 3,405 cf
Outflow = 1.12 cfs @ 12.04 hrs, Volume= 3,405 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.12 cfs @ 12.04 hrs, Volume= 3,405 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 826.78' @ 12.04 hrs
Flood Elev= 830.22'

Device	Routing	Invert	Outlet Devices
#1	Primary	826.22'	**12.0" Round Culvert** L= 13.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 826.22' / 825.96' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.12 cfs @ 12.04 hrs HW=826.78' TW=824.70' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 1.12 cfs @ 3.60 fps)

Summary for Pond 733P: PT 13+50R

Inflow Area = 23,650 sf, 51.78% Impervious, Inflow Depth = 4.36" for 25-yr event
Inflow = 2.95 cfs @ 12.04 hrs, Volume= 8,597 cf
Outflow = 2.95 cfs @ 12.04 hrs, Volume= 8,597 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.95 cfs @ 12.04 hrs, Volume= 8,597 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 825.30' @ 12.04 hrs
Flood Elev= 830.22'

Device	Routing	Invert	Outlet Devices
#1	Primary	823.99'	**12.0" Round Culvert** L= 18.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 823.99' / 823.54' S= 0.0250 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.89 cfs @ 12.04 hrs HW=825.28' TW=824.70' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 2.89 cfs @ 3.68 fps)

Summary for Pond 734P: DMH PT 14+95

Inflow Area = 10,235 sf, 54.79% Impervious, Inflow Depth = 4.47" for 25-yr event
Inflow = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf
Outflow = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 828.85' @ 12.04 hrs
Flood Elev= 833.41'

Device	Routing	Invert	Outlet Devices
#1	Primary	828.25'	**12.0" Round Culvert** L= 156.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 828.25' / 823.54' S= 0.0302 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.30 cfs @ 12.04 hrs HW=828.85' TW=824.70' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 1.30 cfs @ 2.64 fps)

Summary for Pond 735P: DMH PT 15+60

Inflow Area = 10,235 sf, 54.79% Impervious, Inflow Depth = 4.47" for 25-yr event
Inflow = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf
Outflow = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.30 cfs @ 12.04 hrs, Volume= 3,812 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 829.56' @ 12.04 hrs
Flood Elev= 834.12'

Device	Routing	Invert	Outlet Devices
#1	Primary	828.92'	**12.0" Round Culvert** L= 67.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 828.92' / 828.25' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.04 hrs HW=829.56' TW=828.85' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.29 cfs @ 3.51 fps)

Summary for Pond 736P: DMH PT 16+95

Inflow Area =	10,235 sf, 54.79% Impervious,	Inflow Depth =	4.47"	for 25-yr event
Inflow =	1.30 cfs @ 12.04 hrs, Volume=	3,812 cf		
Outflow =	1.30 cfs @ 12.04 hrs, Volume=	3,812 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	1.30 cfs @ 12.04 hrs, Volume=	3,812 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 830.89' @ 12.04 hrs
Flood Elev= 835.13'

Device	Routing	Invert	Outlet Devices
#1	Primary	830.28'	**12.0" Round Culvert** L= 136.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 830.28' / 828.92' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.04 hrs HW=830.89' TW=829.56' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.29 cfs @ 3.73 fps)

Summary for Pond 737P: PT 16+80R

Inflow Area =	4,200 sf, 53.93% Impervious,	Inflow Depth =	4.47"	for 25-yr event
Inflow =	0.53 cfs @ 12.04 hrs, Volume=	1,564 cf		
Outflow =	0.53 cfs @ 12.04 hrs, Volume=	1,564 cf,	Atten= 0%,	Lag= 0.0 min
Primary =	0.53 cfs @ 12.04 hrs, Volume=	1,564 cf		

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 831.14' @ 12.04 hrs
Flood Elev= 834.71'

Device	Routing	Invert	Outlet Devices
#1	Primary	830.71'	**12.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 830.71' / 830.28' S= 0.0165 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.53 cfs @ 12.04 hrs HW=831.14' TW=830.89' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 0.53 cfs @ 2.42 fps)

Summary for Pond 738P: PT 17+19 R

Inflow Area = 6,035 sf, 55.39% Impervious, Inflow Depth = 4.47" for 25-yr event
Inflow = 0.77 cfs @ 12.04 hrs, Volume= 2,248 cf
Outflow = 0.77 cfs @ 12.04 hrs, Volume= 2,248 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.77 cfs @ 12.04 hrs, Volume= 2,248 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 831.14' @ 12.04 hrs
Flood Elev= 834.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	830.59'	**12.0" Round Culvert** L= 31.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 830.59' / 830.28' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.76 cfs @ 12.04 hrs HW=831.14' TW=830.89' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 0.76 cfs @ 2.48 fps)

Summary for Pond 750P: DMH PT 10+55

Inflow Area = 106,620 sf, 50.05% Impervious, Inflow Depth = 4.37" for 25-yr event
Inflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf
Outflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 796.10' @ 12.05 hrs
Flood Elev= 811.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	794.34'	**36.0" Round Culvert** L= 74.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 794.34' / 793.60' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=12.76 cfs @ 12.04 hrs HW=796.08' TW=795.47' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 12.76 cfs @ 4.32 fps)

Summary for Pond 751P: DMH PT 11+30

Inflow Area = 106,620 sf, 50.05% Impervious, Inflow Depth = 4.37" for 25-yr event
Inflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf
Outflow = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.28 cfs @ 12.04 hrs, Volume= 38,810 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 798.03' @ 12.04 hrs
Flood Elev= 814.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	796.23'	**24.0" Round Culvert** L= 79.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 796.23' / 795.44' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=13.23 cfs @ 12.04 hrs HW=798.02' TW=796.08' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 13.23 cfs @ 5.89 fps)

Summary for Pond 752P: PT 11+50 R

Inflow Area = 6,875 sf, 67.88% Impervious, Inflow Depth = 4.80" for 25-yr event
Inflow = 0.92 cfs @ 12.04 hrs, Volume= 2,748 cf
Outflow = 0.92 cfs @ 12.04 hrs, Volume= 2,748 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.92 cfs @ 12.04 hrs, Volume= 2,748 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 812.12' @ 12.04 hrs
Flood Elev= 815.63'

Device	Routing	Invert	Outlet Devices
#1	Primary	811.63'	**12.0" Round Culvert** L= 21.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 811.63' / 810.90' S= 0.0348 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.04 hrs HW=812.12' TW=798.02' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 0.92 cfs @ 2.39 fps)

Summary for Pond 753P: PT 11+50 L

Inflow Area = 13,835 sf, 48.95% Impervious, Inflow Depth = 4.36" for 25-yr event
Inflow = 1.73 cfs @ 12.04 hrs, Volume= 5,029 cf
Outflow = 1.73 cfs @ 12.04 hrs, Volume= 5,029 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.73 cfs @ 12.04 hrs, Volume= 5,029 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 812.34' @ 12.04 hrs
Flood Elev= 815.81'

Device	Routing	Invert	Outlet Devices
#1	Primary	811.63'	**12.0" Round Culvert** L= 29.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 811.63' / 810.90' S= 0.0252 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.72 cfs @ 12.04 hrs HW=812.34' TW=798.02' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 1.72 cfs @ 2.87 fps)

Summary for Pond 780P: DMH A-3

Inflow Area = 34,105 sf, 14.51% Impervious, Inflow Depth = 3.34" for 25-yr event
Inflow = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf
Outflow = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 807.00' @ 12.04 hrs
Flood Elev= 810.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	806.05'	**15.0" Round Culvert** L= 90.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 806.05' / 804.70' S= 0.0150 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.31 cfs @ 12.04 hrs HW=807.00' TW=805.65' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 3.31 cfs @ 3.31 fps)

Summary for Pond 782P: DMH H 5+90

Inflow Area = 85,910 sf, 48.80% Impervious, Inflow Depth = 4.33" for 25-yr event
Inflow = 10.63 cfs @ 12.04 hrs, Volume= 31,033 cf
Outflow = 10.63 cfs @ 12.04 hrs, Volume= 31,033 cf, Atten= 0%, Lag= 0.0 min
Primary = 10.63 cfs @ 12.04 hrs, Volume= 31,033 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 801.26' @ 12.04 hrs
Flood Elev= 806.31'

Device	Routing	Invert	Outlet Devices
#1	Primary	799.75'	**24.0" Round Culvert** L= 235.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 799.75' / 796.23' S= 0.0150 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=10.60 cfs @ 12.04 hrs HW=801.26' TW=798.02' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 10.60 cfs @ 4.18 fps)

Summary for Pond 783P: H 5+75 R

Inflow Area = 10,875 sf, 67.21% Impervious, Inflow Depth = 4.80" for 25-yr event
Inflow = 1.46 cfs @ 12.04 hrs, Volume= 4,347 cf
Outflow = 1.46 cfs @ 12.04 hrs, Volume= 4,347 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.46 cfs @ 12.04 hrs, Volume= 4,347 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 801.65' @ 12.04 hrs
Flood Elev= 804.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	800.94'	**12.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 800.94' / 800.70' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.43 cfs @ 12.04 hrs HW=801.65' TW=801.25' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.43 cfs @ 3.38 fps)

Summary for Pond 784P: H 5+75 L

Inflow Area =	21,665 sf,	46.65% Impervious,	Inflow Depth = 4.26"	for 25-yr event
Inflow =	2.65 cfs @	12.04 hrs, Volume=	7,683 cf	
Outflow =	2.65 cfs @	12.04 hrs, Volume=	7,683 cf, Atten= 0%, Lag= 0.0 min	
Primary =	2.65 cfs @	12.04 hrs, Volume=	7,683 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 801.96' @ 12.04 hrs
Flood Elev= 804.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	800.94'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 800.94' / 800.70' S= 0.0150 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.64 cfs @ 12.04 hrs HW=801.96' TW=801.26' (Dynamic Tailwater)
↑**1=Culvert** (Barrel Controls 2.64 cfs @ 4.10 fps)

Summary for Pond 785P: DMH H 7+65

Inflow Area =	53,370 sf,	45.93% Impervious,	Inflow Depth = 4.27"	for 25-yr event
Inflow =	6.52 cfs @	12.04 hrs, Volume=	19,003 cf	
Outflow =	6.52 cfs @	12.04 hrs, Volume=	19,003 cf, Atten= 0%, Lag= 0.0 min	
Primary =	6.52 cfs @	12.04 hrs, Volume=	19,003 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 819.28' @ 12.04 hrs
Flood Elev= 823.11'

Device	Routing	Invert	Outlet Devices
#1	Primary	817.44'	**15.0" Round Culvert** L= 175.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 817.44' / 800.50' S= 0.0968 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.50 cfs @ 12.04 hrs HW=819.28' TW=801.26' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 6.50 cfs @ 5.30 fps)

Summary for Pond 786P: H 7+75 L

Inflow Area = 10,670 sf, 25.26% Impervious, Inflow Depth = 3.74" for 25-yr event
Inflow = 1.16 cfs @ 12.04 hrs, Volume= 3,322 cf
Outflow = 1.16 cfs @ 12.04 hrs, Volume= 3,322 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.16 cfs @ 12.04 hrs, Volume= 3,322 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 820.40' @ 12.04 hrs
Flood Elev= 823.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	819.84'	**12.0" Round Culvert** L= 22.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 819.84' / 819.11' S= 0.0332 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.16 cfs @ 12.04 hrs HW=820.40' TW=819.28' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 1.16 cfs @ 2.55 fps)

Summary for Pond 787P: H 7+75R

Inflow Area = 20,420 sf, 58.43% Impervious, Inflow Depth = 4.58" for 25-yr event
Inflow = 2.65 cfs @ 12.04 hrs, Volume= 7,790 cf
Outflow = 2.65 cfs @ 12.04 hrs, Volume= 7,790 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.65 cfs @ 12.04 hrs, Volume= 7,790 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 820.83' @ 12.04 hrs
Flood Elev= 823.84'

Device	Routing	Invert	Outlet Devices
#1	Primary	819.84'	**12.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 819.84' / 819.11' S= 0.0608 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.64 cfs @ 12.04 hrs HW=820.82' TW=819.28' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 2.64 cfs @ 3.37 fps)

Summary for Pond 788P: DMH H 9+10

Inflow Area = 22,280 sf, 44.37% Impervious, Inflow Depth = 4.25" for 25-yr event
Inflow = 2.72 cfs @ 12.04 hrs, Volume= 7,891 cf
Outflow = 2.72 cfs @ 12.04 hrs, Volume= 7,891 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.72 cfs @ 12.04 hrs, Volume= 7,891 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 829.57' @ 12.04 hrs
Flood Elev= 832.65'

Device	Routing	Invert	Outlet Devices
#1	Primary	828.55'	**12.0" Round Culvert** L= 143.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 828.55' / 818.54' S= 0.0700 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.71 cfs @ 12.04 hrs HW=829.56' TW=819.28' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 2.71 cfs @ 3.45 fps)

Summary for Pond 789P: H 9+25 R

Inflow Area = 11,750 sf, 40.84% Impervious, Inflow Depth = 4.15" for 25-yr event
Inflow = 1.40 cfs @ 12.04 hrs, Volume= 4,063 cf
Outflow = 1.40 cfs @ 12.04 hrs, Volume= 4,063 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.40 cfs @ 12.04 hrs, Volume= 4,063 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 829.93' @ 12.04 hrs
Flood Elev= 833.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	829.25'	**12.0" Round Culvert** L= 14.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 829.25' / 828.65' S= 0.0429 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.37 cfs @ 12.04 hrs HW=829.92' TW=829.56' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.37 cfs @ 3.46 fps)

Summary for Pond 790P: H 9+25 L

Inflow Area = 10,530 sf, 48.30% Impervious, Inflow Depth = 4.36" for 25-yr event
Inflow = 1.31 cfs @ 12.04 hrs, Volume= 3,828 cf
Outflow = 1.31 cfs @ 12.04 hrs, Volume= 3,828 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.31 cfs @ 12.04 hrs, Volume= 3,828 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 829.93' @ 12.04 hrs
Flood Elev= 833.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	829.25'	**12.0" Round Culvert** L= 25.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 829.25' / 828.65' S= 0.0240 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.28 cfs @ 12.04 hrs HW=829.93' TW=829.56' (Dynamic Tailwater)
↑**1=Culvert** (Outlet Controls 1.28 cfs @ 3.20 fps)

Summary for Pond 795P: LCB A-4

Inflow Area = 34,105 sf, 14.51% Impervious, Inflow Depth = 3.34" for 25-yr event
Inflow = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf
Outflow = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.31 cfs @ 12.04 hrs, Volume= 9,484 cf

Routing by Dyn-Stor-Ind method, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 809.77' @ 12.04 hrs
Flood Elev= 812.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	808.50'	**12.0" Round Culvert** L= 55.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 808.50' / 806.05' S= 0.0445 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.31 cfs @ 12.04 hrs HW=809.77' TW=807.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 3.31 cfs @ 4.21 fps)

Summary for Link 331L: Salisbury Abutters

Inflow Area = 104,541 sf, 29.47% Impervious, Inflow Depth = 1.47" for 25-yr event
Inflow = 2.77 cfs @ 12.17 hrs, Volume= 12,809 cf
Primary = 2.77 cfs @ 12.17 hrs, Volume= 12,809 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Summary for Link POA 1: Railroad Tracks

Inflow Area = 736,485 sf, 25.74% Impervious, Inflow Depth = 0.21" for 25-yr event
Inflow = 3.02 cfs @ 12.05 hrs, Volume= 12,944 cf
Primary = 3.02 cfs @ 12.05 hrs, Volume= 12,944 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

Summary for Link POA 3: POA- Salisbury

Inflow Area = 168,765 sf, 26.41% Impervious, Inflow Depth = 2.14" for 25-yr event
Inflow = 7.68 cfs @ 12.07 hrs, Volume= 30,147 cf
Primary = 7.68 cfs @ 12.07 hrs, Volume= 30,147 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-30.00 hrs, dt= 0.01 hrs

2-YEAR Post-Development - Summary

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10: Overland to Tracks Runoff Area=151,286 sf 4.60% Impervious Runoff Depth=0.00"
Flow Length=257' Tc=15.7 min UI Adjusted CN=33 Runoff=0.00 cfs 0 cf

Subcatchment 40: Overland to south Runoff Area=13,973 sf 12.06% Impervious Runoff Depth=0.92"
Flow Length=350' Tc=16.9 min UI Adjusted CN=72 Runoff=0.23 cfs 1,068 cf

Subcatchment 50: north basin (back #124 Runoff Area=20,232 sf 8.58% Impervious Runoff Depth=0.01"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.00 cfs 21 cf

Subcatchment 51: To Bailey wetland Runoff Area=149,516 sf 4.81% Impervious Runoff Depth=0.03"
Flow Length=720' Tc=26.5 min UI Adjusted CN=44 Runoff=0.01 cfs 375 cf

Subcatchment 60: To Abut Wetlands Runoff Area=9,934 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=615' Tc=9.9 min CN=38 Runoff=0.00 cfs 0 cf

Subcatchment 70: Wetlands in old pit Runoff Area=88,870 sf 0.00% Impervious Runoff Depth=0.02"
Flow Length=230' Tc=12.4 min CN=43 Runoff=0.01 cfs 150 cf

Subcatchment 100: BASIN E Runoff Area=5,648 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=257' Tc=15.7 min CN=39 Runoff=0.00 cfs 0 cf

Subcatchment 101: PT 4+50 R Runoff Area=4,630 sf 52.31% Impervious Runoff Depth=0.82"
Tc=6.0 min CN=70 Runoff=0.11 cfs 315 cf

Subcatchment 102: PT 4+75 L Runoff Area=23,668 sf 14.48% Impervious Runoff Depth=0.37"
Tc=6.0 min CN=59 Runoff=0.12 cfs 723 cf

Subcatchment 111: PT2+25 R Runoff Area=5,678 sf 52.22% Impervious Runoff Depth=0.82"
Tc=6.0 min CN=70 Runoff=0.13 cfs 386 cf

Subcatchment 112: PT3+25 L Runoff Area=25,455 sf 27.54% Impervious Runoff Depth=0.97"
Flow Length=265' Tc=6.0 min CN=73 Runoff=0.73 cfs 2,058 cf

Subcatchment 113: PT 2+25 L Runoff Area=19,505 sf 25.84% Impervious Runoff Depth=1.20"
Flow Length=410' Tc=8.8 min CN=77 Runoff=0.61 cfs 1,946 cf

Subcatchment 115: LCB IN SWALE Runoff Area=21,365 sf 13.20% Impervious Runoff Depth=0.72"
Flow Length=250' Tc=6.9 min CN=68 Runoff=0.38 cfs 1,285 cf

Subcatchment 201: PT 0+67 R Runoff Area=6,315 sf 63.90% Impervious Runoff Depth=1.20"
Tc=6.0 min CN=77 Runoff=0.23 cfs 630 cf

Subcatchment 202: PT 0+67 L Runoff Area=40,700 sf 20.33% Impervious Runoff Depth=0.55"
Flow Length=250' Tc=6.9 min CN=64 Runoff=0.47 cfs 1,865 cf

Subcatchment 300: Overland towards Runoff Area=64,224 sf 21.45% Impervious Runoff Depth=1.08"
Flow Length=251' Tc=7.7 min UI Adjusted CN=75 Runoff=1.90 cfs 5,782 cf

Subcatchment 301: Overland flows Runoff Area=22,936 sf 6.29% Impervious Runoff Depth=0.97"
Flow Length=286' Tc=15.4 min UI Adjusted CN=73 Runoff=0.42 cfs 1,854 cf

Subcatchment 310: Basin D-1 Runoff Area=14,240 sf 8.95% Impervious Runoff Depth=1.08"
Flow Length=162' Tc=6.7 min UI Adjusted CN=75 Runoff=0.45 cfs 1,282 cf

Subcatchment 320: Basin D-2 Runoff Area=12,960 sf 4.90% Impervious Runoff Depth=1.08"
Flow Length=162' Tc=6.7 min CN=75 Runoff=0.41 cfs 1,167 cf

Subcatchment 321: PT 19+45 R Runoff Area=15,840 sf 40.08% Impervious Runoff Depth=1.67"
Flow Length=235' Tc=6.5 min CN=84 Runoff=0.82 cfs 2,199 cf

Subcatchment 322: PT 19+45L Runoff Area=6,505 sf 77.97% Impervious Runoff Depth=2.43"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=0.50 cfs 1,315 cf

Subcatchment 326: PT 21+35 R Runoff Area=15,800 sf 52.72% Impervious Runoff Depth=1.90"
Flow Length=255' Tc=6.0 min CN=87 Runoff=0.96 cfs 2,498 cf

Subcatchment 327: PT21+31 L Runoff Area=9,125 sf 84.42% Impervious Runoff Depth=2.52"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=94 Runoff=0.72 cfs 1,920 cf

Subcatchment 330: Basin D-3 Runoff Area=7,135 sf 0.00% Impervious Runoff Depth=1.02"
Tc=6.0 min CN=74 Runoff=0.22 cfs 609 cf

Subcatchment 520: Overland to B-2 Runoff Area=6,010 sf 0.00% Impervious Runoff Depth=0.06"
Tc=6.0 min CN=46 Runoff=0.00 cfs 28 cf

Subcatchment 525: H 0+95 R Runoff Area=9,755 sf 76.99% Impervious Runoff Depth=2.06"
Tc=6.0 min CN=89 Runoff=0.65 cfs 1,677 cf

Subcatchment 526: H 0+95 L Runoff Area=39,223 sf 45.64% Impervious Runoff Depth=1.02"
Tc=6.0 min CN=74 Runoff=1.20 cfs 3,348 cf

Subcatchment 530: Overland to Basin B-1 Runoff Area=22,840 sf 17.14% Impervious Runoff Depth=0.27"
Tc=6.0 min UI Adjusted CN=56 Runoff=0.05 cfs 520 cf

Subcatchment 532: H 3+50 L Runoff Area=40,120 sf 42.09% Impervious Runoff Depth=1.14"
Tc=6.0 min CN=76 Runoff=1.40 cfs 3,805 cf

Subcatchment 533: PT 4+75 R Runoff Area=17,030 sf 50.44% Impervious Runoff Depth=0.82"
Tc=6.0 min CN=70 Runoff=0.39 cfs 1,159 cf

Subcatchment 700: BASIN A Runoff Area=51,250 sf 6.22% Impervious Runoff Depth=0.15"
Flow Length=230' Tc=12.4 min UI Adjusted CN=51 Runoff=0.02 cfs 622 cf

Subcatchment 711: PT 7+05 R Runoff Area=16,365 sf 95.20% Impervious Runoff Depth=2.84"
Tc=6.0 min CN=97 Runoff=1.38 cfs 3,869 cf

Subcatchment 712: PT 7+05 L Runoff Area=18,095 sf 37.25% Impervious Runoff Depth=1.45"
Tc=6.0 min CN=81 Runoff=0.84 cfs 2,191 cf

Subcatchment 714: PT 8+60 L Runoff Area=21,660 sf 49.78% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=86 Runoff=1.27 cfs 3,281 cf

Subcatchment 715: PT 8+60 R Runoff Area=20,770 sf 67.88% Impervious Runoff Depth=2.15"
Tc=6.0 min CN=90 Runoff=1.43 cfs 3,721 cf

Subcatchment 720: Basin C Runoff Area=17,205 sf 17.06% Impervious Runoff Depth=1.26"
Tc=6.0 min CN=78 Runoff=0.68 cfs 1,805 cf

Subcatchment 722: LCB C5 Runoff Area=15,270 sf 71.38% Impervious Runoff Depth=2.24"
Tc=6.0 min CN=91 Runoff=1.09 cfs 2,850 cf

Subcatchment 732: PT 13+50L Runoff Area=8,140 sf 76.54% Impervious Runoff Depth=2.33"
Tc=6.0 min CN=92 Runoff=0.60 cfs 1,582 cf

Subcatchment 733: PT 13+50R Runoff Area=23,650 sf 51.78% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=86 Runoff=1.38 cfs 3,582 cf

Subcatchment 737: PT 16+80 R Runoff Area=4,200 sf 53.93% Impervious Runoff Depth=1.90"
Tc=6.0 min CN=87 Runoff=0.26 cfs 664 cf

Subcatchment 738: PT 17+18R Runoff Area=6,035 sf 55.39% Impervious Runoff Depth=1.90"
Tc=6.0 min CN=87 Runoff=0.37 cfs 954 cf

Subcatchment 752: PT 11+50R Runoff Area=6,875 sf 67.88% Impervious Runoff Depth=2.15"
Tc=6.0 min CN=90 Runoff=0.47 cfs 1,232 cf

Subcatchment 753: PT 11+50 L Runoff Area=13,835 sf 48.95% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=86 Runoff=0.81 cfs 2,096 cf

Subcatchment 783: H 5+75 R Runoff Area=10,875 sf 67.21% Impervious Runoff Depth=2.15"
Tc=6.0 min CN=90 Runoff=0.75 cfs 1,949 cf

Subcatchment 784: H 5+75 L Runoff Area=21,665 sf 46.65% Impervious Runoff Depth=1.74"
Tc=6.0 min CN=85 Runoff=1.21 cfs 3,142 cf

Subcatchment 786: H 7+75 L Runoff Area=10,670 sf 25.26% Impervious Runoff Depth=1.39"
Tc=6.0 min CN=80 Runoff=0.47 cfs 1,233 cf

Subcatchment 787: H 7+75 R Runoff Area=20,420 sf 58.43% Impervious Runoff Depth=1.98"
Tc=6.0 min CN=88 Runoff=1.30 cfs 3,368 cf

Subcatchment 789: H 9+25 R Runoff Area=11,750 sf 40.84% Impervious Runoff Depth=1.67"
Tc=6.0 min CN=84 Runoff=0.63 cfs 1,631 cf

Subcatchment 790: H 9+25 L Runoff Area=10,530 sf 48.30% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=86 Runoff=0.62 cfs 1,595 cf

Subcatchment 795: Overland LCB A-4 Runoff Area=34,105 sf 14.51% Impervious Runoff Depth=1.14"
Tc=6.0 min UI Adjusted CN=76 Runoff=1.19 cfs 3,235 cf

Reach 1R: overland flows Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.130 L=200.0' S=0.1950 '/' Capacity=2.21 cfs Outflow=0.00 cfs 0 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.00 cfs 0 cf

Pond 1P: DMH PT 9+85 Peak Elev=794.75' Inflow=6.25 cfs 16,245 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=6.25 cfs 16,245 cf

Pond 2P: DMH PT 9+45 Peak Elev=794.34' Inflow=6.25 cfs 16,245 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=6.25 cfs 16,245 cf

Pond 3P: DMH PT 9+05 Peak Elev=793.93' Inflow=6.25 cfs 16,245 cf
36.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=6.25 cfs 16,245 cf

Pond 4P: DMH 21+48 Treatment Peak Elev=817.42' Inflow=2.99 cfs 7,932 cf
18.0" Round Culvert n=0.013 L=18.0' S=0.0100 '/' Outflow=2.99 cfs 7,932 cf

Pond 5P: Bailey Wetlands Peak Elev=776.63' Storage=149 cf Inflow=0.09 cfs 689 cf
Discarded=0.04 cfs 689 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 689 cf

Pond 7P: wetlands Peak Elev=751.20' Storage=150 cf Inflow=0.01 cfs 150 cf
Outflow=0.00 cfs 0 cf

Pond 53P: Basin B-3-(back 124 Bailey) Peak Elev=777.17' Storage=953 cf Inflow=1.85 cfs 5,046 cf
Discarded=0.35 cfs 5,048 cf Primary=0.00 cfs 0 cf Outflow=0.35 cfs 5,048 cf

Pond 60P: Abutters Isolated wetland Inflow=0.00 cfs 0 cf
Primary=0.00 cfs 0 cf

Pond 100P: Basin E Peak Elev=787.43' Storage=111 cf Inflow=0.22 cfs 1,038 cf
Discarded=0.07 cfs 1,038 cf Primary=0.00 cfs 0 cf Outflow=0.07 cfs 1,038 cf

Pond 101P: PT4+50 R Peak Elev=789.54' Inflow=0.11 cfs 315 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0173 '/' Outflow=0.11 cfs 315 cf

Pond 102P: PT4+75 L Peak Elev=789.56' Inflow=0.12 cfs 723 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=0.12 cfs 723 cf

Pond 105P: DMH PT 4+60 Peak Elev=789.37' Inflow=0.22 cfs 1,038 cf
15.0" Round Culvert n=0.013 L=39.0' S=0.0297 '/' Outflow=0.22 cfs 1,038 cf

Pond 110P: Recharge Area Peak Elev=768.00' Storage=1,055 cf Inflow=1.81 cfs 5,676 cf
Discarded=0.38 cfs 5,678 cf Primary=0.00 cfs 0 cf Outflow=0.38 cfs 5,678 cf

Pond 111P: PT2+25 R Peak Elev=771.75' Inflow=0.13 cfs 386 cf
12.0" Round Culvert n=0.013 L=19.0' S=0.0242 '/' Outflow=0.13 cfs 386 cf

Pond 112P: DMH PT 3+25 L Peak Elev=779.66' Inflow=0.73 cfs 2,058 cf
12.0" Round Culvert n=0.013 L=110.0' S=0.0743 '/' Outflow=0.73 cfs 2,058 cf

Pond 113P: PT2+25 L Peak Elev=771.95' Inflow=0.61 cfs 1,946 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0391 '/' Outflow=0.61 cfs 1,946 cf

Pond 114P: DMH PT 2+15 Peak Elev=771.64' Inflow=1.43 cfs 4,391 cf
15.0" Round Culvert n=0.013 L=59.0' S=0.0200 '/' Outflow=1.43 cfs 4,391 cf

Pond 115P: LCB IN SWALE Peak Elev=769.60' Inflow=0.38 cfs 1,285 cf
12.0" Round Culvert n=0.013 L=5.0' S=0.0000 '/' Outflow=0.38 cfs 1,285 cf

Pond 201P: PT0+67 RT Peak Elev=766.74' Inflow=0.23 cfs 630 cf
12.0" Round Culvert n=0.013 L=23.0' S=0.0200 '/' Outflow=0.23 cfs 630 cf

Pond 202P: PT 0+67 L Peak Elev=766.94' Inflow=0.47 cfs 1,865 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0128 '/' Outflow=0.47 cfs 1,865 cf

Pond 203P: DMH PT 0+50 Peak Elev=765.87' Inflow=0.69 cfs 2,495 cf
18.0" Round Culvert n=0.013 L=55.0' S=0.0160 '/' Outflow=0.69 cfs 2,495 cf

Pond 204P: DMH PT 0+24 Peak Elev=764.99' Inflow=0.69 cfs 2,495 cf
18.0" Round Culvert n=0.013 L=74.0' S=0.0200 '/' Outflow=0.69 cfs 2,495 cf

Pond 310P: Basin D-1 Peak Elev=835.54' Storage=805 cf Inflow=0.45 cfs 1,282 cf
Outflow=0.02 cfs 590 cf

Pond 320P: Basin D-2 Peak Elev=817.68' Storage=1,509 cf Inflow=0.41 cfs 1,757 cf
Discarded=0.01 cfs 306 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 306 cf

Pond 321P: PT 19+45 R Peak Elev=823.06' Inflow=0.82 cfs 2,199 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0400 '/' Outflow=0.82 cfs 2,199 cf

Pond 322P: PT 9+45 L Peak Elev=822.95' Inflow=0.50 cfs 1,315 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0218 '/' Outflow=0.50 cfs 1,315 cf

Pond 323P: DMH PT 19+55 Peak Elev=822.37' Inflow=1.31 cfs 3,514 cf
12.0" Round Culvert n=0.013 L=99.0' S=0.0200 '/' Outflow=1.31 cfs 3,514 cf

Pond 324P: DMH PT20+45 Peak Elev=820.39' Inflow=1.31 cfs 3,514 cf
12.0" Round Culvert n=0.013 L=93.0' S=0.0219 '/' Outflow=1.31 cfs 3,514 cf

Pond 325P: DMH PT 21+48 Peak Elev=817.71' Inflow=2.99 cfs 7,932 cf
18.0" Round Culvert n=0.013 L=10.0' S=0.0200 '/' Outflow=2.99 cfs 7,932 cf

Pond 326P: PT 21+35 R Peak Elev=817.91' Inflow=0.96 cfs 2,498 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0215 '/' Outflow=0.96 cfs 2,498 cf

Pond 327P: PT 21+31L Peak Elev=817.93' Inflow=0.72 cfs 1,920 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0049 '/' Outflow=0.72 cfs 1,920 cf

Pond 330-A: Level Spreader Peak Elev=806.01' Storage=186 cf Inflow=0.16 cfs 532 cf
Discarded=0.00 cfs 216 cf Primary=0.16 cfs 315 cf Outflow=0.16 cfs 532 cf

Pond 330P: Basin D-3 Peak Elev=812.20' Storage=3,523 cf Inflow=3.21 cfs 8,541 cf
Discarded=0.22 cfs 7,976 cf Primary=0.16 cfs 532 cf Outflow=0.37 cfs 8,508 cf

Pond 520P: Lower Basin B-2 Peak Elev=779.16' Storage=1,240 cf Inflow=0.97 cfs 2,870 cf
Discarded=0.10 cfs 2,557 cf Primary=0.09 cfs 314 cf Outflow=0.19 cfs 2,870 cf

Pond 525P: H 0+95 R Peak Elev=778.66' Inflow=0.65 cfs 1,677 cf
12.0" Round Culvert n=0.013 L=10.0' S=0.0420 '/' Outflow=0.65 cfs 1,677 cf

Pond 526P: H 0+95 R Peak Elev=778.78' Inflow=1.20 cfs 3,348 cf
15.0" Round Culvert n=0.013 L=21.0' S=0.0200 '/' Outflow=1.20 cfs 3,348 cf

Pond 527P: DMH H 1+05 Peak Elev=778.32' Inflow=1.85 cfs 5,026 cf
15.0" Round Culvert n=0.013 L=14.0' S=0.0200 '/' Outflow=1.85 cfs 5,026 cf

Pond 528P: H 1+10 Stormwater Unit Peak Elev=777.96' Inflow=1.85 cfs 5,026 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0200 '/' Outflow=1.85 cfs 5,026 cf

Pond 530P: Upper Basin B-1 Peak Elev=785.01' Storage=791 cf Inflow=1.81 cfs 5,484 cf
Discarded=0.07 cfs 2,642 cf Primary=0.97 cfs 2,842 cf Outflow=1.03 cfs 5,484 cf

Pond 531P: DMH H 3+40 Peak Elev=787.15' Inflow=1.79 cfs 4,964 cf
15.0" Round Culvert n=0.013 L=34.0' S=0.0300 '/' Outflow=1.79 cfs 4,964 cf

Pond 532P: H 3+50 L Peak Elev=788.03' Inflow=1.40 cfs 3,805 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0394 '/' Outflow=1.40 cfs 3,805 cf

Pond 533P: H 3+50 R Peak Elev=787.77' Inflow=0.39 cfs 1,159 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0592 '/' Outflow=0.39 cfs 1,159 cf

Pond 534P: DMH H 3+10 Stormwater Unit Peak Elev=786.13' Inflow=1.79 cfs 4,964 cf
15.0" Round Culvert n=0.013 L=43.0' S=0.0344 '/' Outflow=1.79 cfs 4,964 cf

Pond 700P: Basin A Peak Elev=786.10' Storage=14,697 cf Inflow=13.49 cfs 42,411 cf
Discarded=1.08 cfs 41,969 cf Primary=0.00 cfs 0 cf Outflow=1.08 cfs 41,969 cf

Pond 701P: DMH A-1 Peak Elev=793.27' Inflow=1.19 cfs 3,235 cf
15.0" Round Culvert n=0.013 L=50.0' S=0.1450 '/' Outflow=1.19 cfs 3,235 cf

Pond 702P: DMH A-2 Peak Elev=805.22' Inflow=1.19 cfs 3,235 cf
15.0" Round Culvert n=0.013 L=168.0' S=0.0711 '/' Outflow=1.19 cfs 3,235 cf

Pond 710P: DMH PT 7+15 Peak Elev=796.74' Inflow=2.21 cfs 6,060 cf
15.0" Round Culvert n=0.013 L=80.0' S=0.0100 '/' Outflow=2.21 cfs 6,060 cf

Pond 711P: DMH PT 7+05 R Peak Elev=797.01' Inflow=1.38 cfs 3,869 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0191 '/' Outflow=1.38 cfs 3,869 cf

Pond 712P: PT 7+05 L Peak Elev=796.91' Inflow=0.84 cfs 2,191 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=0.84 cfs 2,191 cf

Pond 713P: DMH PT8+75 Peak Elev=793.56' Inflow=8.95 cfs 23,247 cf
36.0" Round Culvert n=0.013 L=129.0' S=0.0343 '/' Outflow=8.95 cfs 23,247 cf

Pond 714P: PT 8+60 L Peak Elev=797.89' Inflow=1.27 cfs 3,281 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0281 '/' Outflow=1.27 cfs 3,281 cf

Pond 715P: PT 8+60 R Peak Elev=800.72' Inflow=1.43 cfs 3,721 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0325 '/' Outflow=1.43 cfs 3,721 cf

Pond 720P: Basin C Peak Elev=818.52' Storage=4,269 cf Inflow=3.28 cfs 8,587 cf
Primary=0.29 cfs 6,396 cf Secondary=0.00 cfs 0 cf Outflow=0.29 cfs 6,396 cf

Pond 721P: DMH C-3 Peak Elev=814.24' Inflow=0.29 cfs 6,396 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0100 '/' Outflow=0.29 cfs 6,396 cf

Pond 722P: LCB C5 Peak Elev=814.54' Inflow=1.09 cfs 2,850 cf
12.0" Round Culvert n=0.013 L=17.0' S=0.0588 '/' Outflow=1.09 cfs 2,850 cf

Pond 723P: DMH C4 Peak Elev=810.51' Inflow=1.15 cfs 9,246 cf
15.0" Round Culvert n=0.013 L=173.0' S=0.0650 '/' Outflow=1.15 cfs 9,246 cf

Pond 724P: DMH PT 8+12 Peak Elev=798.48' Inflow=1.15 cfs 9,246 cf
18.0" Round Culvert n=0.013 L=48.0' S=0.0833 '/' Outflow=1.15 cfs 9,246 cf

Pond 725P: DMH PT 7+90 Peak Elev=793.77' Inflow=3.35 cfs 15,306 cf
24.0" Round Culvert n=0.013 L=102.0' S=0.0490 '/' Outflow=3.35 cfs 15,306 cf

Pond 731: DMH PT 13+40 Peak Elev=824.07' Inflow=2.61 cfs 6,782 cf
15.0" Round Culvert n=0.013 L=54.0' S=0.0231 '/' Outflow=2.61 cfs 6,782 cf

Pond 732P: PT 13+50 L Peak Elev=826.61' Inflow=0.60 cfs 1,582 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0200 '/' Outflow=0.60 cfs 1,582 cf

Pond 733P: PT 13+50R Peak Elev=824.61' Inflow=1.38 cfs 3,582 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0250 '/' Outflow=1.38 cfs 3,582 cf

Pond 734P: DMH PT 14+95 Peak Elev=828.65' Inflow=0.63 cfs 1,618 cf
12.0" Round Culvert n=0.013 L=156.0' S=0.0302 '/' Outflow=0.63 cfs 1,618 cf

Pond 735P: DMH PT 15+60 Peak Elev=829.33' Inflow=0.63 cfs 1,618 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0100 '/' Outflow=0.63 cfs 1,618 cf

Pond 736P: DMH PT 16+95 Peak Elev=830.68' Inflow=0.63 cfs 1,618 cf
12.0" Round Culvert n=0.013 L=136.0' S=0.0100 '/' Outflow=0.63 cfs 1,618 cf

Pond 737P: PT 16+80R Peak Elev=830.98' Inflow=0.26 cfs 664 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0165 '/' Outflow=0.26 cfs 664 cf

Pond 738P: PT 17+19 R Peak Elev=830.94' Inflow=0.37 cfs 954 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0100 '/' Outflow=0.37 cfs 954 cf

Pond 750P: DMH PT 10+55 Peak Elev=795.41' Inflow=6.25 cfs 16,245 cf
36.0" Round Culvert n=0.013 L=74.0' S=0.0100 '/' Outflow=6.25 cfs 16,245 cf

Pond 751P: DMH PT 11+30 Peak Elev=797.34' Inflow=6.25 cfs 16,245 cf
24.0" Round Culvert n=0.013 L=79.0' S=0.0100 '/' Outflow=6.25 cfs 16,245 cf

Pond 752P: PT 11+50 R Peak Elev=811.97' Inflow=0.47 cfs 1,232 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0348 '/' Outflow=0.47 cfs 1,232 cf

Pond 753P: PT 11+50 L Peak Elev=812.09' Inflow=0.81 cfs 2,096 cf
12.0" Round Culvert n=0.013 L=29.0' S=0.0252 '/' Outflow=0.81 cfs 2,096 cf

Pond 780P: DMH A-3 Peak Elev=806.57' Inflow=1.19 cfs 3,235 cf
15.0" Round Culvert n=0.013 L=90.0' S=0.0150 '/' Outflow=1.19 cfs 3,235 cf

Pond 782P: DMH H 5+90 Peak Elev=800.71' Inflow=4.97 cfs 12,917 cf
24.0" Round Culvert n=0.013 L=235.0' S=0.0150 '/' Outflow=4.97 cfs 12,917 cf

Pond 783P: H 5+75 R Peak Elev=801.41' Inflow=0.75 cfs 1,949 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0100 '/' Outflow=0.75 cfs 1,949 cf

Pond 784P: H 5+75 L Peak Elev=801.54' Inflow=1.21 cfs 3,142 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0150 '/' Outflow=1.21 cfs 3,142 cf

Pond 785P: DMH H 7+65 Peak Elev=818.33' Inflow=3.01 cfs 7,826 cf
15.0" Round Culvert n=0.013 L=175.0' S=0.0968 '/' Outflow=3.01 cfs 7,826 cf

Pond 786P: H 7+75 L Peak Elev=820.18' Inflow=0.47 cfs 1,233 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0332 '/' Outflow=0.47 cfs 1,233 cf

Pond 787P: H 7+75R Peak Elev=820.44' Inflow=1.30 cfs 3,368 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0608 '/' Outflow=1.30 cfs 3,368 cf

Pond 788P: DMH H 9+10 Peak Elev=829.14' Inflow=1.24 cfs 3,226 cf
12.0" Round Culvert n=0.013 L=143.0' S=0.0700 '/' Outflow=1.24 cfs 3,226 cf

Pond 789P: H 9+25 R Peak Elev=829.65' Inflow=0.63 cfs 1,631 cf
12.0" Round Culvert n=0.013 L=14.0' S=0.0429 '/' Outflow=0.63 cfs 1,631 cf

Pond 790P: H 9+25 L Peak Elev=829.64' Inflow=0.62 cfs 1,595 cf
12.0" Round Culvert n=0.013 L=25.0' S=0.0240 '/' Outflow=0.62 cfs 1,595 cf

Pond 795P: LCB A-4 Peak Elev=809.07' Inflow=1.19 cfs 3,235 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0445 '/' Outflow=1.19 cfs 3,235 cf

Link 331L: Salisbury Abutters Inflow=0.42 cfs 2,170 cf
Primary=0.42 cfs 2,170 cf

Link POA 1: Railroad Tracks Inflow=0.69 cfs 2,495 cf
Primary=0.69 cfs 2,495 cf

Link POA 3: POA- Salisbury

Inflow=2.16 cfs 7,952 cf
Primary=2.16 cfs 7,952 cf

10-YEAR Post-Development - Summary

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10: Overland to Tracks Runoff Area=151,286 sf 4.60% Impervious Runoff Depth=0.03"
Flow Length=257' Tc=15.7 min UI Adjusted CN=33 Runoff=0.02 cfs 410 cf

Subcatchment 40: Overland to south Runoff Area=13,973 sf 12.06% Impervious Runoff Depth=2.11"
Flow Length=350' Tc=16.9 min UI Adjusted CN=72 Runoff=0.54 cfs 2,461 cf

Subcatchment 50: north basin (back #124 Runoff Area=20,232 sf 8.58% Impervious Runoff Depth=0.28"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.02 cfs 479 cf

Subcatchment 51: To Bailey wetland Runoff Area=149,516 sf 4.81% Impervious Runoff Depth=0.36"
Flow Length=720' Tc=26.5 min UI Adjusted CN=44 Runoff=0.23 cfs 4,544 cf

Subcatchment 60: To Abut Wetlands Runoff Area=9,934 sf 0.00% Impervious Runoff Depth=0.15"
Flow Length=615' Tc=9.9 min CN=38 Runoff=0.00 cfs 122 cf

Subcatchment 70: Wetlands in old pit Runoff Area=88,870 sf 0.00% Impervious Runoff Depth=0.32"
Flow Length=230' Tc=12.4 min CN=43 Runoff=0.12 cfs 2,396 cf

Subcatchment 100: BASIN E Runoff Area=5,648 sf 0.00% Impervious Runoff Depth=0.18"
Flow Length=257' Tc=15.7 min CN=39 Runoff=0.00 cfs 84 cf

Subcatchment 101: PT 4+50 R Runoff Area=4,630 sf 52.31% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=0.26 cfs 754 cf

Subcatchment 102: PT 4+75 L Runoff Area=23,668 sf 14.48% Impervious Runoff Depth=1.17"
Tc=6.0 min CN=59 Runoff=0.70 cfs 2,312 cf

Subcatchment 111: PT2+25 R Runoff Area=5,678 sf 52.22% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=0.32 cfs 925 cf

Subcatchment 112: PT3+25 L Runoff Area=25,455 sf 27.54% Impervious Runoff Depth=2.19"
Flow Length=265' Tc=6.0 min CN=73 Runoff=1.64 cfs 4,655 cf

Subcatchment 113: PT 2+25 L Runoff Area=19,505 sf 25.84% Impervious Runoff Depth=2.53"
Flow Length=410' Tc=8.8 min CN=77 Runoff=1.26 cfs 4,114 cf

Subcatchment 115: LCB IN SWALE Runoff Area=21,365 sf 13.20% Impervious Runoff Depth=1.80"
Flow Length=250' Tc=6.9 min CN=68 Runoff=1.04 cfs 3,208 cf

Subcatchment 201: PT 0+67 R Runoff Area=6,315 sf 63.90% Impervious Runoff Depth=2.53"
Tc=6.0 min CN=77 Runoff=0.48 cfs 1,332 cf

Subcatchment 202: PT 0+67 L Runoff Area=40,700 sf 20.33% Impervious Runoff Depth=1.51"
Flow Length=250' Tc=6.9 min CN=64 Runoff=1.59 cfs 5,120 cf

Subcatchment 300: Overland towards Runoff Area=64,224 sf 21.45% Impervious Runoff Depth=2.36"
Flow Length=251' Tc=7.7 min UI Adjusted CN=75 Runoff=4.07 cfs 12,633 cf

Subcatchment 301: Overland flows Runoff Area=22,936 sf 6.29% Impervious Runoff Depth=2.19"
Flow Length=286' Tc=15.4 min UI Adjusted CN=73 Runoff=0.96 cfs 4,195 cf

Subcatchment 310: Basin D-1 Runoff Area=14,240 sf 8.95% Impervious Runoff Depth=2.36"
Flow Length=162' Tc=6.7 min UI Adjusted CN=75 Runoff=0.96 cfs 2,801 cf

Subcatchment 320: Basin D-2 Runoff Area=12,960 sf 4.90% Impervious Runoff Depth=2.36"
Flow Length=162' Tc=6.7 min CN=75 Runoff=0.87 cfs 2,549 cf

Subcatchment 321: PT 19+45 R Runoff Area=15,840 sf 40.08% Impervious Runoff Depth=3.17"
Flow Length=235' Tc=6.5 min CN=84 Runoff=1.45 cfs 4,184 cf

Subcatchment 322: PT 19+45L Runoff Area=6,505 sf 77.97% Impervious Runoff Depth=4.09"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=0.75 cfs 2,217 cf

Subcatchment 326: PT 21+35 R Runoff Area=15,800 sf 52.72% Impervious Runoff Depth=3.46"
Flow Length=255' Tc=6.0 min CN=87 Runoff=1.61 cfs 4,561 cf

Subcatchment 327: PT21+31 L Runoff Area=9,125 sf 84.42% Impervious Runoff Depth=4.20"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=94 Runoff=1.07 cfs 3,193 cf

Subcatchment 330: Basin D-3 Runoff Area=7,135 sf 0.00% Impervious Runoff Depth=2.28"
Tc=6.0 min CN=74 Runoff=0.48 cfs 1,354 cf

Subcatchment 520: Overland to B-2 Runoff Area=6,010 sf 0.00% Impervious Runoff Depth=0.45"
Tc=6.0 min CN=46 Runoff=0.02 cfs 227 cf

Subcatchment 525: H 0+95 R Runoff Area=9,755 sf 76.99% Impervious Runoff Depth=3.67"
Tc=6.0 min CN=89 Runoff=1.04 cfs 2,981 cf

Subcatchment 526: H 0+95 L Runoff Area=39,223 sf 45.64% Impervious Runoff Depth=2.28"
Tc=6.0 min CN=74 Runoff=2.64 cfs 7,442 cf

Subcatchment 530: Overland to Basin B-1 Runoff Area=22,840 sf 17.14% Impervious Runoff Depth=0.99"
Tc=6.0 min UI Adjusted CN=56 Runoff=0.52 cfs 1,876 cf

Subcatchment 532: H 3+50 L Runoff Area=40,120 sf 42.09% Impervious Runoff Depth=2.45"
Tc=6.0 min CN=76 Runoff=2.91 cfs 8,175 cf

Subcatchment 533: PT 4+75 R Runoff Area=17,030 sf 50.44% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=0.97 cfs 2,775 cf

Subcatchment 700: BASIN A Runoff Area=51,250 sf 6.22% Impervious Runoff Depth=0.70"
Flow Length=230' Tc=12.4 min UI Adjusted CN=51 Runoff=0.44 cfs 2,992 cf

Subcatchment 711: PT 7+05 R Runoff Area=16,365 sf 95.20% Impervious Runoff Depth>4.54"
Tc=6.0 min CN=97 Runoff=2.00 cfs 6,188 cf

Subcatchment 712: PT 7+05 L Runoff Area=18,095 sf 37.25% Impervious Runoff Depth=2.89"
Tc=6.0 min CN=81 Runoff=1.56 cfs 4,355 cf

Subcatchment 714: PT 8+60 L Runoff Area=21,660 sf 49.78% Impervious Runoff Depth=3.36"
Tc=6.0 min CN=86 Runoff=2.16 cfs 6,073 cf

Subcatchment 715: PT 8+60 R Runoff Area=20,770 sf 67.88% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=90 Runoff=2.27 cfs 6,526 cf

Subcatchment 720: Basin C Runoff Area=17,205 sf 17.06% Impervious Runoff Depth=2.62"
Tc=6.0 min CN=78 Runoff=1.34 cfs 3,754 cf

Subcatchment 722: LCB C5 Runoff Area=15,270 sf 71.38% Impervious Runoff Depth=3.88"
Tc=6.0 min CN=91 Runoff=1.70 cfs 4,931 cf

Subcatchment 732: PT 13+50L Runoff Area=8,140 sf 76.54% Impervious Runoff Depth=3.98"
Tc=6.0 min CN=92 Runoff=0.93 cfs 2,701 cf

Subcatchment 733: PT 13+50R Runoff Area=23,650 sf 51.78% Impervious Runoff Depth=3.36"
Tc=6.0 min CN=86 Runoff=2.35 cfs 6,631 cf

Subcatchment 737: PT 16+80 R Runoff Area=4,200 sf 53.93% Impervious Runoff Depth=3.46"
Tc=6.0 min CN=87 Runoff=0.43 cfs 1,212 cf

Subcatchment 738: PT 17+18R Runoff Area=6,035 sf 55.39% Impervious Runoff Depth=3.46"
Tc=6.0 min CN=87 Runoff=0.62 cfs 1,742 cf

Subcatchment 752: PT 11+50R Runoff Area=6,875 sf 67.88% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=90 Runoff=0.75 cfs 2,160 cf

Subcatchment 753: PT 11+50 L Runoff Area=13,835 sf 48.95% Impervious Runoff Depth=3.36"
Tc=6.0 min CN=86 Runoff=1.38 cfs 3,879 cf

Subcatchment 783: H 5+75 R Runoff Area=10,875 sf 67.21% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=90 Runoff=1.19 cfs 3,417 cf

Subcatchment 784: H 5+75 L Runoff Area=21,665 sf 46.65% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=85 Runoff=2.10 cfs 5,897 cf

Subcatchment 786: H 7+75 L Runoff Area=10,670 sf 25.26% Impervious Runoff Depth=2.80"
Tc=6.0 min CN=80 Runoff=0.89 cfs 2,487 cf

Subcatchment 787: H 7+75 R Runoff Area=20,420 sf 58.43% Impervious Runoff Depth=3.56"
Tc=6.0 min CN=88 Runoff=2.14 cfs 6,066 cf

Subcatchment 789: H 9+25 R Runoff Area=11,750 sf 40.84% Impervious Runoff Depth=3.17"
Tc=6.0 min CN=84 Runoff=1.11 cfs 3,104 cf

Subcatchment 790: H 9+25 L Runoff Area=10,530 sf 48.30% Impervious Runoff Depth=3.36"
Tc=6.0 min CN=86 Runoff=1.05 cfs 2,952 cf

Subcatchment 795: Overland LCB A-4 Runoff Area=34,105 sf 14.51% Impervious Runoff Depth=2.45"
Tc=6.0 min UI Adjusted CN=76 Runoff=2.48 cfs 6,949 cf

Reach 1R: overland flows Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.130 L=200.0' S=0.1950 '/' Capacity=2.21 cfs Outflow=0.00 cfs 0 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.06' Max Vel=0.09 fps Inflow=0.08 cfs 493 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=0.06 cfs 493 cf

Pond 1P: DMH PT 9+85 Peak Elev=795.23' Inflow=10.60 cfs 29,962 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=10.60 cfs 29,962 cf

Pond 2P: DMH PT 9+45 Peak Elev=794.80' Inflow=10.60 cfs 29,962 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=10.60 cfs 29,962 cf

Pond 3P: DMH PT 9+05 Peak Elev=794.36' Inflow=10.60 cfs 29,962 cf
36.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=10.60 cfs 29,962 cf

Pond 4P: DMH 21+48 Treatment Peak Elev=817.75' Inflow=4.88 cfs 14,155 cf
18.0" Round Culvert n=0.013 L=18.0' S=0.0100 '/' Outflow=4.88 cfs 14,155 cf

Pond 5P: Bailey Wetlands Peak Elev=777.37' Storage=2,582 cf Inflow=1.03 cfs 9,111 cf
Discarded=0.30 cfs 7,957 cf Primary=0.21 cfs 1,154 cf Outflow=0.51 cfs 9,111 cf

Pond 7P: wetlands Peak Elev=751.33' Storage=2,396 cf Inflow=0.12 cfs 2,396 cf
Outflow=0.00 cfs 0 cf

Pond 53P: Basin B-3-(back 124 Bailey) Peak Elev=777.46' Storage=2,628 cf Inflow=3.68 cfs 12,055 cf
Discarded=0.42 cfs 11,564 cf Primary=0.08 cfs 493 cf Outflow=0.50 cfs 12,057 cf

Pond 60P: Abutters Isolated wetland Inflow=0.06 cfs 615 cf
Primary=0.06 cfs 615 cf

Pond 100P: Basin E Peak Elev=788.34' Storage=639 cf Inflow=0.96 cfs 3,151 cf
Discarded=0.19 cfs 3,151 cf Primary=0.00 cfs 0 cf Outflow=0.19 cfs 3,151 cf

Pond 101P: PT4+50 R Peak Elev=789.71' Inflow=0.26 cfs 754 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0173 '/' Outflow=0.26 cfs 754 cf

Pond 102P: PT4+75 L Peak Elev=789.87' Inflow=0.70 cfs 2,312 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=0.70 cfs 2,312 cf

Pond 105P: DMH PT 4+60 Peak Elev=789.62' Inflow=0.96 cfs 3,067 cf
15.0" Round Culvert n=0.013 L=39.0' S=0.0297 '/' Outflow=0.96 cfs 3,067 cf

Pond 110P: Recharge Area Peak Elev=769.95' Storage=3,568 cf Inflow=4.17 cfs 12,902 cf
Discarded=0.47 cfs 12,904 cf Primary=0.00 cfs 0 cf Outflow=0.47 cfs 12,904 cf

Pond 111P: PT2+25 R Peak Elev=772.02' Inflow=0.32 cfs 925 cf
12.0" Round Culvert n=0.013 L=19.0' S=0.0242 '/' Outflow=0.32 cfs 925 cf

Pond 112P: DMH PT 3+25 L Peak Elev=779.92' Inflow=1.64 cfs 4,655 cf
12.0" Round Culvert n=0.013 L=110.0' S=0.0743 '/' Outflow=1.64 cfs 4,655 cf

Pond 113P: PT2+25 L Peak Elev=772.24' Inflow=1.26 cfs 4,114 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0391 '/' Outflow=1.26 cfs 4,114 cf

Pond 114P: DMH PT 2+15 Peak Elev=771.97' Inflow=3.13 cfs 9,695 cf
15.0" Round Culvert n=0.013 L=59.0' S=0.0200 '/' Outflow=3.13 cfs 9,695 cf

Pond 115P: LCB IN SWALE Peak Elev=769.96' Inflow=1.04 cfs 3,208 cf
12.0" Round Culvert n=0.013 L=5.0' S=0.0000 '/' Outflow=1.04 cfs 3,208 cf

Pond 201P: PT0+67 RT Peak Elev=766.84' Inflow=0.48 cfs 1,332 cf
12.0" Round Culvert n=0.013 L=23.0' S=0.0200 '/' Outflow=0.48 cfs 1,332 cf

Pond 202P: PT 0+67 L Peak Elev=767.32' Inflow=1.59 cfs 5,120 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0128 '/' Outflow=1.59 cfs 5,120 cf

Pond 203P: DMH PT 0+50 Peak Elev=766.16' Inflow=2.06 cfs 6,452 cf
18.0" Round Culvert n=0.013 L=55.0' S=0.0160 '/' Outflow=2.06 cfs 6,452 cf

Pond 204P: DMH PT 0+24 Peak Elev=765.28' Inflow=2.06 cfs 6,452 cf
18.0" Round Culvert n=0.013 L=74.0' S=0.0200 '/' Outflow=2.06 cfs 6,452 cf

Pond 310P: Basin D-1 Peak Elev=835.78' Storage=1,198 cf Inflow=0.96 cfs 2,801 cf
Outflow=0.11 cfs 2,105 cf

Pond 320P: Basin D-2 Peak Elev=818.58' Storage=3,959 cf Inflow=0.87 cfs 4,654 cf
Discarded=0.02 cfs 934 cf Primary=0.00 cfs 0 cf Outflow=0.02 cfs 934 cf

Pond 321P: PT 19+45 R Peak Elev=823.24' Inflow=1.45 cfs 4,184 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0400 '/' Outflow=1.45 cfs 4,184 cf

Pond 322P: PT 9+45 L Peak Elev=823.04' Inflow=0.75 cfs 2,217 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0218 '/' Outflow=0.75 cfs 2,217 cf

Pond 323P: DMH PT 19+55 Peak Elev=822.61' Inflow=2.20 cfs 6,401 cf
12.0" Round Culvert n=0.013 L=99.0' S=0.0200 '/' Outflow=2.20 cfs 6,401 cf

Pond 324P: DMH PT20+45 Peak Elev=820.63' Inflow=2.20 cfs 6,401 cf
12.0" Round Culvert n=0.013 L=93.0' S=0.0219 '/' Outflow=2.20 cfs 6,401 cf

Pond 325P: DMH PT 21+48 Peak Elev=818.09' Inflow=4.88 cfs 14,155 cf
18.0" Round Culvert n=0.013 L=10.0' S=0.0200 '/' Outflow=4.88 cfs 14,155 cf

Pond 326P: PT 21+35 R Peak Elev=818.27' Inflow=1.61 cfs 4,561 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0215 '/' Outflow=1.61 cfs 4,561 cf

Pond 327P: PT 21+31L Peak Elev=818.24' Inflow=1.07 cfs 3,193 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0049 '/' Outflow=1.07 cfs 3,193 cf

Pond 330-A: Level Spreader Peak Elev=806.04' Storage=188 cf Inflow=1.00 cfs 4,414 cf
Discarded=0.00 cfs 248 cf Primary=1.16 cfs 4,163 cf Outflow=1.17 cfs 4,410 cf

Pond 330P: Basin D-3 Peak Elev=813.21' Storage=5,385 cf Inflow=5.36 cfs 15,509 cf
Discarded=0.26 cfs 10,946 cf Primary=1.00 cfs 4,414 cf Outflow=1.26 cfs 15,360 cf

Pond 520P: Lower Basin B-2 Peak Elev=780.25' Storage=3,113 cf Inflow=3.16 cfs 9,864 cf
Discarded=0.18 cfs 5,297 cf Primary=0.80 cfs 4,567 cf Outflow=0.98 cfs 9,864 cf

Pond 525P: H 0+95 R Peak Elev=778.94' Inflow=1.04 cfs 2,981 cf
12.0" Round Culvert n=0.013 L=10.0' S=0.0420 '/' Outflow=1.04 cfs 2,981 cf

Pond 526P: H 0+95 R Peak Elev=779.18' Inflow=2.64 cfs 7,442 cf
15.0" Round Culvert n=0.013 L=21.0' S=0.0200 '/' Outflow=2.64 cfs 7,442 cf

Pond 527P: DMH H 1+05 Peak Elev=778.75' Inflow=3.68 cfs 10,423 cf
15.0" Round Culvert n=0.013 L=14.0' S=0.0200 '/' Outflow=3.68 cfs 10,423 cf

Pond 528P: H 1+10 Stormwater Unit Peak Elev=778.32' Inflow=3.68 cfs 10,423 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0200 '/' Outflow=3.68 cfs 10,423 cf

Pond 530P: Upper Basin B-1 Peak Elev=785.68' Storage=1,620 cf Inflow=4.39 cfs 12,825 cf
Discarded=0.10 cfs 3,188 cf Primary=3.14 cfs 9,637 cf Outflow=3.23 cfs 12,825 cf

Pond 531P: DMH H 3+40 Peak Elev=787.56' Inflow=3.88 cfs 10,950 cf
15.0" Round Culvert n=0.013 L=34.0' S=0.0300 '/' Outflow=3.88 cfs 10,950 cf

Pond 532P: H 3+50 L Peak Elev=788.33' Inflow=2.91 cfs 8,175 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0394 '/' Outflow=2.91 cfs 8,175 cf

Pond 533P: H 3+50 R Peak Elev=787.97' Inflow=0.97 cfs 2,775 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0592 '/' Outflow=0.97 cfs 2,775 cf

Pond 534P: DMH H 3+10 Stormwater Unit Peak Elev=786.54' Inflow=3.88 cfs 10,950 cf
15.0" Round Culvert n=0.013 L=43.0' S=0.0344 '/' Outflow=3.88 cfs 10,950 cf

Pond 700P: Basin A Peak Elev=787.32' Storage=36,307 cf Inflow=26.41 cfs 81,815 cf
Discarded=1.37 cfs 76,917 cf Primary=0.00 cfs 0 cf Outflow=1.37 cfs 76,917 cf

Pond 701P: DMH A-1 Peak Elev=793.54' Inflow=2.48 cfs 6,949 cf
15.0" Round Culvert n=0.013 L=50.0' S=0.1450 '/' Outflow=2.48 cfs 6,949 cf

Pond 702P: DMH A-2 Peak Elev=805.49' Inflow=2.48 cfs 6,949 cf
15.0" Round Culvert n=0.013 L=168.0' S=0.0711 '/' Outflow=2.48 cfs 6,949 cf

Pond 710P: DMH PT 7+15 Peak Elev=797.00' Inflow=3.56 cfs 10,543 cf
15.0" Round Culvert n=0.013 L=80.0' S=0.0100 '/' Outflow=3.56 cfs 10,543 cf

Pond 711P: DMH PT 7+05 R Peak Elev=797.27' Inflow=2.00 cfs 6,188 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0191 '/' Outflow=2.00 cfs 6,188 cf

Pond 712P: PT 7+05 L Peak Elev=797.21' Inflow=1.56 cfs 4,355 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=1.56 cfs 4,355 cf

Pond 713P: DMH PT8+75 Peak Elev=793.94' Inflow=15.03 cfs 42,561 cf
36.0" Round Culvert n=0.013 L=129.0' S=0.0343 '/' Outflow=15.03 cfs 42,561 cf

Pond 714P: PT 8+60 L Peak Elev=798.13' Inflow=2.16 cfs 6,073 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0281 '/' Outflow=2.16 cfs 6,073 cf

Pond 715P: PT 8+60 R Peak Elev=800.94' Inflow=2.27 cfs 6,526 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0325 '/' Outflow=2.27 cfs 6,526 cf

Pond 720P: Basin C Peak Elev=818.80' Storage=4,985 cf Inflow=5.67 cfs 16,041 cf
Primary=4.53 cfs 13,838 cf Secondary=0.00 cfs 0 cf Outflow=4.53 cfs 13,838 cf

Pond 721P: DMH C-3 Peak Elev=815.20' Inflow=4.53 cfs 13,838 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0100 '/' Outflow=4.53 cfs 13,838 cf

Pond 722P: LCB C5 Peak Elev=814.71' Inflow=1.70 cfs 4,931 cf
12.0" Round Culvert n=0.013 L=17.0' S=0.0588 '/' Outflow=1.70 cfs 4,931 cf

Pond 723P: DMH C4 Peak Elev=811.63' Inflow=5.93 cfs 18,769 cf
15.0" Round Culvert n=0.013 L=173.0' S=0.0650 '/' Outflow=5.93 cfs 18,769 cf

Pond 724P: DMH PT 8+12 Peak Elev=799.24' Inflow=5.93 cfs 18,769 cf
18.0" Round Culvert n=0.013 L=48.0' S=0.0833 '/' Outflow=5.93 cfs 18,769 cf

Pond 725P: DMH PT 7+90 Peak Elev=794.37' Inflow=9.13 cfs 29,313 cf
24.0" Round Culvert n=0.013 L=102.0' S=0.0490 '/' Outflow=9.13 cfs 29,313 cf

Pond 731: DMH PT 13+40 Peak Elev=824.40' Inflow=4.33 cfs 12,286 cf
15.0" Round Culvert n=0.013 L=54.0' S=0.0231 '/' Outflow=4.33 cfs 12,286 cf

Pond 732P: PT 13+50 L Peak Elev=826.72' Inflow=0.93 cfs 2,701 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0200 '/' Outflow=0.93 cfs 2,701 cf

Pond 733P: PT 13+50R Peak Elev=824.91' Inflow=2.35 cfs 6,631 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0250 '/' Outflow=2.35 cfs 6,631 cf

Pond 734P: DMH PT 14+95 Peak Elev=828.78' Inflow=1.04 cfs 2,954 cf
12.0" Round Culvert n=0.013 L=156.0' S=0.0302 '/' Outflow=1.04 cfs 2,954 cf

Pond 735P: DMH PT 15+60 Peak Elev=829.48' Inflow=1.04 cfs 2,954 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0100 '/' Outflow=1.04 cfs 2,954 cf

Pond 736P: DMH PT 16+95 Peak Elev=830.81' Inflow=1.04 cfs 2,954 cf
12.0" Round Culvert n=0.013 L=136.0' S=0.0100 '/' Outflow=1.04 cfs 2,954 cf

Pond 737P: PT 16+80R Peak Elev=831.08' Inflow=0.43 cfs 1,212 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0165 '/' Outflow=0.43 cfs 1,212 cf

Pond 738P: PT 17+19 R Peak Elev=831.07' Inflow=0.62 cfs 1,742 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0100 '/' Outflow=0.62 cfs 1,742 cf

Pond 750P: DMH PT 10+55 Peak Elev=795.85' Inflow=10.60 cfs 29,962 cf
36.0" Round Culvert n=0.013 L=74.0' S=0.0100 '/' Outflow=10.60 cfs 29,962 cf

Pond 751P: DMH PT 11+30 Peak Elev=797.77' Inflow=10.60 cfs 29,962 cf
24.0" Round Culvert n=0.013 L=79.0' S=0.0100 '/' Outflow=10.60 cfs 29,962 cf

Pond 752P: PT 11+50 R Peak Elev=812.07' Inflow=0.75 cfs 2,160 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0348 '/' Outflow=0.75 cfs 2,160 cf

Pond 753P: PT 11+50 L Peak Elev=812.25' Inflow=1.38 cfs 3,879 cf
12.0" Round Culvert n=0.013 L=29.0' S=0.0252 '/' Outflow=1.38 cfs 3,879 cf

Pond 780P: DMH A-3 Peak Elev=806.84' Inflow=2.48 cfs 6,949 cf
15.0" Round Culvert n=0.013 L=90.0' S=0.0150 '/' Outflow=2.48 cfs 6,949 cf

Pond 782P: DMH H 5+90 Peak Elev=801.06' Inflow=8.47 cfs 23,923 cf
24.0" Round Culvert n=0.013 L=235.0' S=0.0150 '/' Outflow=8.47 cfs 23,923 cf

Pond 783P: H 5+75 R Peak Elev=801.56' Inflow=1.19 cfs 3,417 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0100 '/' Outflow=1.19 cfs 3,417 cf

Pond 784P: H 5+75 L Peak Elev=801.80' Inflow=2.10 cfs 5,897 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0150 '/' Outflow=2.10 cfs 5,897 cf

Pond 785P: DMH H 7+65 Peak Elev=818.83' Inflow=5.18 cfs 14,609 cf
15.0" Round Culvert n=0.013 L=175.0' S=0.0968 '/' Outflow=5.18 cfs 14,609 cf

Pond 786P: H 7+75 L Peak Elev=820.32' Inflow=0.89 cfs 2,487 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0332 '/' Outflow=0.89 cfs 2,487 cf

Pond 787P: H 7+75R Peak Elev=820.66' Inflow=2.14 cfs 6,066 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0608 '/' Outflow=2.14 cfs 6,066 cf

Pond 788P: DMH H 9+10 Peak Elev=829.38' Inflow=2.16 cfs 6,056 cf
12.0" Round Culvert n=0.013 L=143.0' S=0.0700 '/' Outflow=2.16 cfs 6,056 cf

Pond 789P: H 9+25 R Peak Elev=829.80' Inflow=1.11 cfs 3,104 cf
12.0" Round Culvert n=0.013 L=14.0' S=0.0429 '/' Outflow=1.11 cfs 3,104 cf

Pond 790P: H 9+25 L Peak Elev=829.81' Inflow=1.05 cfs 2,952 cf
12.0" Round Culvert n=0.013 L=25.0' S=0.0240 '/' Outflow=1.05 cfs 2,952 cf

Pond 795P: LCB A-4 Peak Elev=809.42' Inflow=2.48 cfs 6,949 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0445 '/' Outflow=2.48 cfs 6,949 cf

Link 331L: Salisbury Abutters Inflow=2.10 cfs 8,357 cf
Primary=2.10 cfs 8,357 cf

Link POA 1: Railroad Tracks Inflow=2.06 cfs 6,863 cf
Primary=2.06 cfs 6,863 cf

Link POA 3: POA- Salisbury

Inflow=4.97 cfs 20,990 cf
Primary=4.97 cfs 20,990 cf

100-YEAR Post-Development

Time span=1.00-30.00 hrs, dt=0.01 hrs, 2901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10: Overland to Tracks Runoff Area=151,286 sf 4.60% Impervious Runoff Depth=0.53"
Flow Length=257' Tc=15.7 min UI Adjusted CN=33 Runoff=0.31 cfs 6,624 cf

Subcatchment 40: Overland to south Runoff Area=13,973 sf 12.06% Impervious Runoff Depth=4.35"
Flow Length=350' Tc=16.9 min UI Adjusted CN=72 Runoff=1.07 cfs 5,060 cf

Subcatchment 50: north basin (back #124 Runoff Area=20,232 sf 8.58% Impervious Runoff Depth=1.26"
Tc=6.0 min UI Adjusted CN=42 Runoff=0.48 cfs 2,116 cf

Subcatchment 51: To Bailey wetland Runoff Area=149,516 sf 4.81% Impervious Runoff Depth=1.44"
Flow Length=720' Tc=26.5 min UI Adjusted CN=44 Runoff=2.20 cfs 17,902 cf

Subcatchment 60: To Abut Wetlands Runoff Area=9,934 sf 0.00% Impervious Runoff Depth=0.91"
Flow Length=615' Tc=9.9 min CN=38 Runoff=0.09 cfs 754 cf

Subcatchment 70: Wetlands in old pit Runoff Area=88,870 sf 0.00% Impervious Runoff Depth=1.35"
Flow Length=230' Tc=12.4 min CN=43 Runoff=1.72 cfs 9,963 cf

Subcatchment 100: BASIN E Runoff Area=5,648 sf 0.00% Impervious Runoff Depth=0.99"
Flow Length=257' Tc=15.7 min CN=39 Runoff=0.05 cfs 468 cf

Subcatchment 101: PT 4+50 R Runoff Area=4,630 sf 52.31% Impervious Runoff Depth=4.12"
Tc=6.0 min CN=70 Runoff=0.54 cfs 1,591 cf

Subcatchment 102: PT 4+75 L Runoff Area=23,668 sf 14.48% Impervious Runoff Depth=2.93"
Tc=6.0 min CN=59 Runoff=1.90 cfs 5,780 cf

Subcatchment 111: PT2+25 R Runoff Area=5,678 sf 52.22% Impervious Runoff Depth=4.12"
Tc=6.0 min CN=70 Runoff=0.66 cfs 1,951 cf

Subcatchment 112: PT3+25 L Runoff Area=25,455 sf 27.54% Impervious Runoff Depth=4.46"
Flow Length=265' Tc=6.0 min CN=73 Runoff=3.22 cfs 9,455 cf

Subcatchment 113: PT 2+25 L Runoff Area=19,505 sf 25.84% Impervious Runoff Depth=4.91"
Flow Length=410' Tc=8.8 min CN=77 Runoff=2.32 cfs 7,979 cf

Subcatchment 115: LCB IN SWALE Runoff Area=21,365 sf 13.20% Impervious Runoff Depth=3.90"
Flow Length=250' Tc=6.9 min CN=68 Runoff=2.23 cfs 6,946 cf

Subcatchment 201: PT 0+67 R Runoff Area=6,315 sf 63.90% Impervious Runoff Depth=4.91"
Tc=6.0 min CN=77 Runoff=0.88 cfs 2,583 cf

Subcatchment 202: PT 0+67 L Runoff Area=40,700 sf 20.33% Impervious Runoff Depth=3.46"
Flow Length=250' Tc=6.9 min CN=64 Runoff=3.74 cfs 11,752 cf

Subcatchment 300: Overland towards Runoff Area=64,224 sf 21.45% Impervious Runoff Depth=4.68"
Flow Length=251' Tc=7.7 min UI Adjusted CN=75 Runoff=7.73 cfs 25,059 cf

Subcatchment 301: Overland flows Runoff Area=22,936 sf 6.29% Impervious Runoff Depth=4.46"
Flow Length=286' Tc=15.4 min UI Adjusted CN=73 Runoff=1.89 cfs 8,519 cf

Subcatchment 310: Basin D-1 Runoff Area=14,240 sf 8.95% Impervious Runoff Depth=4.68"
Flow Length=162' Tc=6.7 min UI Adjusted CN=75 Runoff=1.82 cfs 5,556 cf

Subcatchment 320: Basin D-2 Runoff Area=12,960 sf 4.90% Impervious Runoff Depth=4.68"
Flow Length=162' Tc=6.7 min CN=75 Runoff=1.65 cfs 5,057 cf

Subcatchment 321: PT 19+45 R Runoff Area=15,840 sf 40.08% Impervious Runoff Depth=5.71"
Flow Length=235' Tc=6.5 min CN=84 Runoff=2.43 cfs 7,540 cf

Subcatchment 322: PT 19+45L Runoff Area=6,505 sf 77.97% Impervious Runoff Depth=6.77"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=93 Runoff=1.15 cfs 3,668 cf

Subcatchment 326: PT 21+35 R Runoff Area=15,800 sf 52.72% Impervious Runoff Depth=6.06"
Flow Length=255' Tc=6.0 min CN=87 Runoff=2.61 cfs 7,980 cf

Subcatchment 327: PT21+31 L Runoff Area=9,125 sf 84.42% Impervious Runoff Depth=6.88"
Flow Length=295' Slope=0.0400 '/' Tc=6.0 min CN=94 Runoff=1.63 cfs 5,235 cf

Subcatchment 330: Basin D-3 Runoff Area=7,135 sf 0.00% Impervious Runoff Depth=4.57"
Tc=6.0 min CN=74 Runoff=0.92 cfs 2,717 cf

Subcatchment 520: Overland to B-2 Runoff Area=6,010 sf 0.00% Impervious Runoff Depth=1.62"
Tc=6.0 min CN=46 Runoff=0.22 cfs 813 cf

Subcatchment 525: H 0+95 R Runoff Area=9,755 sf 76.99% Impervious Runoff Depth=6.29"
Tc=6.0 min CN=89 Runoff=1.66 cfs 5,117 cf

Subcatchment 526: H 0+95 L Runoff Area=39,223 sf 45.64% Impervious Runoff Depth=4.57"
Tc=6.0 min CN=74 Runoff=5.08 cfs 14,936 cf

Subcatchment 530: Overland to Basin B-1 Runoff Area=22,840 sf 17.14% Impervious Runoff Depth=2.62"
Tc=6.0 min UI Adjusted CN=56 Runoff=1.60 cfs 4,982 cf

Subcatchment 532: H 3+50 L Runoff Area=40,120 sf 42.09% Impervious Runoff Depth=4.80"
Tc=6.0 min CN=76 Runoff=5.44 cfs 16,032 cf

Subcatchment 533: PT 4+75 R Runoff Area=17,030 sf 50.44% Impervious Runoff Depth=4.12"
Tc=6.0 min CN=70 Runoff=1.99 cfs 5,851 cf

Subcatchment 700: BASIN A Runoff Area=51,250 sf 6.22% Impervious Runoff Depth=2.11"
Flow Length=230' Tc=12.4 min UI Adjusted CN=51 Runoff=1.97 cfs 9,009 cf

Subcatchment 711: PT 7+05 R Runoff Area=16,365 sf 95.20% Impervious Runoff Depth>7.24"
Tc=6.0 min CN=97 Runoff=2.97 cfs 9,868 cf

Subcatchment 712: PT 7+05 L Runoff Area=18,095 sf 37.25% Impervious Runoff Depth=5.37"
Tc=6.0 min CN=81 Runoff=2.72 cfs 8,091 cf

Subcatchment 714: PT 8+60 L Runoff Area=21,660 sf 49.78% Impervious Runoff Depth=5.94"
Tc=6.0 min CN=86 Runoff=3.53 cfs 10,729 cf

Subcatchment 715: PT 8+60 R Runoff Area=20,770 sf 67.88% Impervious Runoff Depth=6.41"
Tc=6.0 min CN=90 Runoff=3.57 cfs 11,098 cf

Subcatchment 720: Basin C Runoff Area=17,205 sf 17.06% Impervious Runoff Depth=5.02"
Tc=6.0 min CN=78 Runoff=2.44 cfs 7,201 cf

Subcatchment 722: LCB C5 Runoff Area=15,270 sf 71.38% Impervious Runoff Depth=6.53"
Tc=6.0 min CN=91 Runoff=2.65 cfs 8,309 cf

Subcatchment 732: PT 13+50L Runoff Area=8,140 sf 76.54% Impervious Runoff Depth=6.65"
Tc=6.0 min CN=92 Runoff=1.43 cfs 4,509 cf

Subcatchment 733: PT 13+50R Runoff Area=23,650 sf 51.78% Impervious Runoff Depth=5.94"
Tc=6.0 min CN=86 Runoff=3.86 cfs 11,715 cf

Subcatchment 737: PT 16+80 R Runoff Area=4,200 sf 53.93% Impervious Runoff Depth=6.06"
Tc=6.0 min CN=87 Runoff=0.69 cfs 2,121 cf

Subcatchment 738: PT 17+18R Runoff Area=6,035 sf 55.39% Impervious Runoff Depth=6.06"
Tc=6.0 min CN=87 Runoff=1.00 cfs 3,048 cf

Subcatchment 752: PT 11+50R Runoff Area=6,875 sf 67.88% Impervious Runoff Depth=6.41"
Tc=6.0 min CN=90 Runoff=1.18 cfs 3,674 cf

Subcatchment 753: PT 11+50 L Runoff Area=13,835 sf 48.95% Impervious Runoff Depth=5.94"
Tc=6.0 min CN=86 Runoff=2.26 cfs 6,853 cf

Subcatchment 783: H 5+75 R Runoff Area=10,875 sf 67.21% Impervious Runoff Depth=6.41"
Tc=6.0 min CN=90 Runoff=1.87 cfs 5,811 cf

Subcatchment 784: H 5+75 L Runoff Area=21,665 sf 46.65% Impervious Runoff Depth=5.83"
Tc=6.0 min CN=85 Runoff=3.48 cfs 10,522 cf

Subcatchment 786: H 7+75 L Runoff Area=10,670 sf 25.26% Impervious Runoff Depth=5.25"
Tc=6.0 min CN=80 Runoff=1.57 cfs 4,669 cf

Subcatchment 787: H 7+75 R Runoff Area=20,420 sf 58.43% Impervious Runoff Depth=6.18"
Tc=6.0 min CN=88 Runoff=3.42 cfs 10,512 cf

Subcatchment 789: H 9+25 R Runoff Area=11,750 sf 40.84% Impervious Runoff Depth=5.71"
Tc=6.0 min CN=84 Runoff=1.86 cfs 5,593 cf

Subcatchment 790: H 9+25 L Runoff Area=10,530 sf 48.30% Impervious Runoff Depth=5.94"
Tc=6.0 min CN=86 Runoff=1.72 cfs 5,216 cf

Subcatchment 795: Overland LCB A-4 Runoff Area=34,105 sf 14.51% Impervious Runoff Depth=4.80"
Tc=6.0 min UI Adjusted CN=76 Runoff=4.63 cfs 13,629 cf

Reach 1R: overland flows Avg. Flow Depth=0.04' Max Vel=0.43 fps Inflow=0.41 cfs 365 cf
n=0.130 L=200.0' S=0.1950 '/' Capacity=2.21 cfs Outflow=0.25 cfs 365 cf

Reach 5R: overland to Abut Wetland Avg. Flow Depth=0.36' Max Vel=0.29 fps Inflow=3.23 cfs 18,627 cf
n=0.400 L=215.0' S=0.0419 '/' Capacity=6.09 cfs Outflow=3.01 cfs 18,625 cf

Pond 1P: DMH PT 9+85 Peak Elev=795.87' Inflow=17.36 cfs 52,850 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=17.36 cfs 52,850 cf

Pond 2P: DMH PT 9+45 Peak Elev=795.42' Inflow=17.36 cfs 52,850 cf
36.0" Round Culvert n=0.013 L=43.0' S=0.0100 '/' Outflow=17.36 cfs 52,850 cf

Pond 3P: DMH PT 9+05 Peak Elev=794.94' Inflow=17.36 cfs 52,850 cf
36.0" Round Culvert n=0.013 L=32.0' S=0.0100 '/' Outflow=17.36 cfs 52,850 cf

Pond 4P: DMH 21+48 Treatment Peak Elev=818.25' Inflow=7.81 cfs 24,422 cf
18.0" Round Culvert n=0.013 L=18.0' S=0.0100 '/' Outflow=7.81 cfs 24,422 cf

Pond 5P: Bailey Wetlands Peak Elev=777.99' Storage=5,926 cf Inflow=7.34 cfs 34,430 cf
Discarded=0.50 cfs 15,718 cf Primary=2.82 cfs 18,706 cf Outflow=3.31 cfs 34,425 cf

Pond 7P: wetlands Peak Elev=751.76' Storage=9,963 cf Inflow=1.72 cfs 9,963 cf
Outflow=0.00 cfs 0 cf

Pond 53P: Basin B-3-(back 124 Bailey) Peak Elev=777.92' Storage=5,429 cf Inflow=7.20 cfs 40,876 cf
Discarded=0.56 cfs 22,250 cf Primary=3.23 cfs 18,627 cf Outflow=3.79 cfs 40,877 cf

Pond 60P: Abutters Isolated wetland Inflow=3.05 cfs 19,379 cf
Primary=3.05 cfs 19,379 cf

Pond 100P: Basin E Peak Elev=789.35' Storage=1,768 cf Inflow=2.45 cfs 7,839 cf
Discarded=0.35 cfs 7,474 cf Primary=0.41 cfs 365 cf Outflow=0.76 cfs 7,839 cf

Pond 101P: PT4+50 R Peak Elev=790.00' Inflow=0.54 cfs 1,591 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0173 '/' Outflow=0.54 cfs 1,591 cf

Pond 102P: PT4+75 L Peak Elev=790.28' Inflow=1.90 cfs 5,780 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=1.90 cfs 5,780 cf

Pond 105P: DMH PT 4+60 Peak Elev=789.94' Inflow=2.44 cfs 7,371 cf
15.0" Round Culvert n=0.013 L=39.0' S=0.0297 '/' Outflow=2.44 cfs 7,371 cf

Pond 110P: Recharge Area Peak Elev=771.99' Storage=4,404 cf Inflow=8.26 cfs 26,331 cf
Discarded=0.57 cfs 20,644 cf Primary=6.29 cfs 5,688 cf Outflow=6.86 cfs 26,332 cf

Pond 111P: PT2+25 R Peak Elev=772.75' Inflow=0.66 cfs 1,951 cf
12.0" Round Culvert n=0.013 L=19.0' S=0.0242 '/' Outflow=0.66 cfs 1,951 cf

Pond 112P: DMH PT 3+25 L Peak Elev=780.45' Inflow=3.22 cfs 9,455 cf
12.0" Round Culvert n=0.013 L=110.0' S=0.0743 '/' Outflow=3.22 cfs 9,455 cf

Pond 113P: PT2+25 L Peak Elev=773.09' Inflow=2.32 cfs 7,979 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0391 '/' Outflow=2.32 cfs 7,979 cf

Pond 114P: DMH PT 2+15 Peak Elev=772.73' Inflow=6.03 cfs 19,384 cf
15.0" Round Culvert n=0.013 L=59.0' S=0.0200 '/' Outflow=6.03 cfs 19,384 cf

Pond 115P: LCB IN SWALE Peak Elev=772.18' Inflow=2.23 cfs 6,946 cf
12.0" Round Culvert n=0.013 L=5.0' S=0.0000 '/' Outflow=2.23 cfs 6,946 cf

Pond 201P: PT0+67 RT Peak Elev=768.14' Inflow=0.88 cfs 2,583 cf
12.0" Round Culvert n=0.013 L=23.0' S=0.0200 '/' Outflow=0.88 cfs 2,583 cf

Pond 202P: PT 0+67 L Peak Elev=768.71' Inflow=3.74 cfs 11,752 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0128 '/' Outflow=3.74 cfs 11,752 cf

Pond 203P: DMH PT 0+50 Peak Elev=768.12' Inflow=10.17 cfs 20,023 cf
18.0" Round Culvert n=0.013 L=55.0' S=0.0160 '/' Outflow=10.17 cfs 20,023 cf

Pond 204P: DMH PT 0+24 Peak Elev=766.80' Inflow=10.17 cfs 20,023 cf
18.0" Round Culvert n=0.013 L=74.0' S=0.0200 '/' Outflow=10.17 cfs 20,023 cf

Pond 310P: Basin D-1 Peak Elev=836.34' Storage=2,411 cf Inflow=1.82 cfs 5,556 cf
Outflow=0.21 cfs 4,856 cf

Pond 320P: Basin D-2 Peak Elev=819.24' Storage=6,073 cf Inflow=1.81 cfs 9,913 cf
Discarded=0.03 cfs 1,662 cf Primary=0.17 cfs 2,670 cf Outflow=0.20 cfs 4,332 cf

Pond 321P: PT 19+45 R Peak Elev=823.59' Inflow=2.43 cfs 7,540 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0400 '/' Outflow=2.43 cfs 7,540 cf

Pond 322P: PT 9+45 L Peak Elev=823.36' Inflow=1.15 cfs 3,668 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0218 '/' Outflow=1.15 cfs 3,668 cf

Pond 323P: DMH PT 19+55 Peak Elev=823.17' Inflow=3.58 cfs 11,207 cf
12.0" Round Culvert n=0.013 L=99.0' S=0.0200 '/' Outflow=3.58 cfs 11,207 cf

Pond 324P: DMH PT20+45 Peak Elev=821.19' Inflow=3.58 cfs 11,207 cf
12.0" Round Culvert n=0.013 L=93.0' S=0.0219 '/' Outflow=3.58 cfs 11,207 cf

Pond 325P: DMH PT 21+48 Peak Elev=819.08' Inflow=7.81 cfs 24,422 cf
18.0" Round Culvert n=0.013 L=10.0' S=0.0200 '/' Outflow=7.81 cfs 24,422 cf

Pond 326P: PT 21+35 R Peak Elev=819.54' Inflow=2.61 cfs 7,980 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0215 '/' Outflow=2.61 cfs 7,980 cf

Pond 327P: PT 21+31L Peak Elev=819.28' Inflow=1.63 cfs 5,235 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0049 '/' Outflow=1.63 cfs 5,235 cf

Pond 330-A: Level Spreader Peak Elev=806.07' Storage=189 cf Inflow=2.57 cfs 14,048 cf
Discarded=0.00 cfs 291 cf Primary=2.56 cfs 13,669 cf Outflow=2.57 cfs 13,960 cf

Pond 330P: Basin D-3 Peak Elev=814.35' Storage=8,367 cf Inflow=8.74 cfs 29,810 cf
Discarded=0.32 cfs 15,239 cf Primary=2.57 cfs 14,048 cf Outflow=2.89 cfs 29,287 cf

Pond 520P: Lower Basin B-2 Peak Elev=780.63' Storage=3,938 cf Inflow=9.06 cfs 23,832 cf
Discarded=0.21 cfs 7,304 cf Primary=6.65 cfs 16,528 cf Outflow=6.86 cfs 23,832 cf

Pond 525P: H 0+95 R Peak Elev=780.67' Inflow=1.66 cfs 5,117 cf
12.0" Round Culvert n=0.013 L=10.0' S=0.0420 '/' Outflow=1.66 cfs 5,117 cf

Pond 526P: H 0+95 R Peak Elev=781.20' Inflow=5.08 cfs 14,936 cf
15.0" Round Culvert n=0.013 L=21.0' S=0.0200 '/' Outflow=5.08 cfs 14,936 cf

Pond 527P: DMH H 1+05 Peak Elev=780.49' Inflow=6.73 cfs 20,053 cf
15.0" Round Culvert n=0.013 L=14.0' S=0.0200 '/' Outflow=6.73 cfs 20,053 cf

Pond 528P: H 1+10 Stormwater Unit Peak Elev=779.21' Inflow=6.73 cfs 20,053 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0200 '/' Outflow=6.73 cfs 20,053 cf

Pond 530P: Upper Basin B-1 Peak Elev=785.82' Storage=1,823 cf Inflow=9.03 cfs 26,865 cf
Discarded=0.10 cfs 3,846 cf Primary=8.84 cfs 23,019 cf Outflow=8.94 cfs 26,865 cf

Pond 531P: DMH H 3+40 Peak Elev=789.24' Inflow=7.43 cfs 21,883 cf
15.0" Round Culvert n=0.013 L=34.0' S=0.0300 '/' Outflow=7.43 cfs 21,883 cf

Pond 532P: H 3+50 L Peak Elev=790.05' Inflow=5.44 cfs 16,032 cf
15.0" Round Culvert n=0.013 L=18.0' S=0.0394 '/' Outflow=5.44 cfs 16,032 cf

Pond 533P: H 3+50 R Peak Elev=789.50' Inflow=1.99 cfs 5,851 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0592 '/' Outflow=1.99 cfs 5,851 cf

Pond 534P: DMH H 3+10 Stormwater Unit Peak Elev=787.69' Inflow=7.43 cfs 21,883 cf
15.0" Round Culvert n=0.013 L=43.0' S=0.0344 '/' Outflow=7.43 cfs 21,883 cf

Pond 700P: Basin A Peak Elev=789.24' Storage=76,006 cf Inflow=45.24 cfs 149,948 cf
Discarded=1.93 cfs 123,000 cf Primary=0.00 cfs 0 cf Outflow=1.93 cfs 123,000 cf

Pond 701P: DMH A-1 Peak Elev=793.98' Inflow=4.63 cfs 13,629 cf
15.0" Round Culvert n=0.013 L=50.0' S=0.1450 '/' Outflow=4.63 cfs 13,629 cf

Pond 702P: DMH A-2 Peak Elev=805.93' Inflow=4.63 cfs 13,629 cf
15.0" Round Culvert n=0.013 L=168.0' S=0.0711 '/' Outflow=4.63 cfs 13,629 cf

Pond 710P: DMH PT 7+15 Peak Elev=797.55' Inflow=5.68 cfs 17,959 cf
15.0" Round Culvert n=0.013 L=80.0' S=0.0100 '/' Outflow=5.68 cfs 17,959 cf

Pond 711P: DMH PT 7+05 R Peak Elev=798.15' Inflow=2.97 cfs 9,868 cf
12.0" Round Culvert n=0.013 L=11.0' S=0.0191 '/' Outflow=2.97 cfs 9,868 cf

Pond 712P: PT 7+05 L Peak Elev=798.06' Inflow=2.72 cfs 8,091 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0100 '/' Outflow=2.72 cfs 8,091 cf

Pond 713P: DMH PT8+75 Peak Elev=794.44' Inflow=24.46 cfs 74,677 cf
36.0" Round Culvert n=0.013 L=129.0' S=0.0343 '/' Outflow=24.46 cfs 74,677 cf

Pond 714P: PT 8+60 L Peak Elev=798.67' Inflow=3.53 cfs 10,729 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0281 '/' Outflow=3.53 cfs 10,729 cf

Pond 715P: PT 8+60 R Peak Elev=801.47' Inflow=3.57 cfs 11,098 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0325 '/' Outflow=3.57 cfs 11,098 cf

Pond 720P: Basin C Peak Elev=819.08' Storage=5,757 cf Inflow=9.41 cfs 28,595 cf
Primary=6.72 cfs 26,365 cf Secondary=0.00 cfs 0 cf Outflow=6.72 cfs 26,365 cf

Pond 721P: DMH C-3 Peak Elev=816.04' Inflow=6.72 cfs 26,365 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0100 '/' Outflow=6.72 cfs 26,365 cf

Pond 722P: LCB C5 Peak Elev=814.99' Inflow=2.65 cfs 8,309 cf
12.0" Round Culvert n=0.013 L=17.0' S=0.0588 '/' Outflow=2.65 cfs 8,309 cf

Pond 723P: DMH C4 Peak Elev=813.09' Inflow=9.28 cfs 34,674 cf
15.0" Round Culvert n=0.013 L=173.0' S=0.0650 '/' Outflow=9.28 cfs 34,674 cf

Pond 724P: DMH PT 8+12 Peak Elev=799.94' Inflow=9.28 cfs 34,674 cf
18.0" Round Culvert n=0.013 L=48.0' S=0.0833 '/' Outflow=9.28 cfs 34,674 cf

Pond 725P: DMH PT 7+90 Peak Elev=794.97' Inflow=14.96 cfs 52,633 cf
24.0" Round Culvert n=0.013 L=102.0' S=0.0490 '/' Outflow=14.96 cfs 52,633 cf

Pond 731: DMH PT 13+40 Peak Elev=825.27' Inflow=6.98 cfs 21,394 cf
15.0" Round Culvert n=0.013 L=54.0' S=0.0231 '/' Outflow=6.98 cfs 21,394 cf

Pond 732P: PT 13+50 L Peak Elev=826.87' Inflow=1.43 cfs 4,509 cf
12.0" Round Culvert n=0.013 L=13.0' S=0.0200 '/' Outflow=1.43 cfs 4,509 cf

Pond 733P: PT 13+50R Peak Elev=826.29' Inflow=3.86 cfs 11,715 cf
12.0" Round Culvert n=0.013 L=18.0' S=0.0250 '/' Outflow=3.86 cfs 11,715 cf

Pond 734P: DMH PT 14+95 Peak Elev=828.96' Inflow=1.69 cfs 5,169 cf
12.0" Round Culvert n=0.013 L=156.0' S=0.0302 '/' Outflow=1.69 cfs 5,169 cf

Pond 735P: DMH PT 15+60 Peak Elev=829.67' Inflow=1.69 cfs 5,169 cf
12.0" Round Culvert n=0.013 L=67.0' S=0.0100 '/' Outflow=1.69 cfs 5,169 cf

Pond 736P: DMH PT 16+95 Peak Elev=831.00' Inflow=1.69 cfs 5,169 cf
12.0" Round Culvert n=0.013 L=136.0' S=0.0100 '/' Outflow=1.69 cfs 5,169 cf

Pond 737P: PT 16+80R Peak Elev=831.23' Inflow=0.69 cfs 2,121 cf
12.0" Round Culvert n=0.013 L=26.0' S=0.0165 '/' Outflow=0.69 cfs 2,121 cf

Pond 738P: PT 17+19 R Peak Elev=831.25' Inflow=1.00 cfs 3,048 cf
12.0" Round Culvert n=0.013 L=31.0' S=0.0100 '/' Outflow=1.00 cfs 3,048 cf

Pond 750P: DMH PT 10+55 Peak Elev=796.47' Inflow=17.36 cfs 52,850 cf
36.0" Round Culvert n=0.013 L=74.0' S=0.0100 '/' Outflow=17.36 cfs 52,850 cf

Pond 751P: DMH PT 11+30 Peak Elev=798.55' Inflow=17.36 cfs 52,850 cf
24.0" Round Culvert n=0.013 L=79.0' S=0.0100 '/' Outflow=17.36 cfs 52,850 cf

Pond 752P: PT 11+50 R Peak Elev=812.20' Inflow=1.18 cfs 3,674 cf
12.0" Round Culvert n=0.013 L=21.0' S=0.0348 '/' Outflow=1.18 cfs 3,674 cf

Pond 753P: PT 11+50 L Peak Elev=812.49' Inflow=2.26 cfs 6,853 cf
12.0" Round Culvert n=0.013 L=29.0' S=0.0252 '/' Outflow=2.26 cfs 6,853 cf

Pond 780P: DMH A-3 Peak Elev=807.28' Inflow=4.63 cfs 13,629 cf
15.0" Round Culvert n=0.013 L=90.0' S=0.0150 '/' Outflow=4.63 cfs 13,629 cf

Pond 782P: DMH H 5+90 Peak Elev=801.58' Inflow=13.92 cfs 42,323 cf
24.0" Round Culvert n=0.013 L=235.0' S=0.0150 '/' Outflow=13.92 cfs 42,323 cf

Pond 783P: H 5+75 R Peak Elev=801.89' Inflow=1.87 cfs 5,811 cf
12.0" Round Culvert n=0.013 L=24.0' S=0.0100 '/' Outflow=1.87 cfs 5,811 cf

Pond 784P: H 5+75 L Peak Elev=802.42' Inflow=3.48 cfs 10,522 cf
12.0" Round Culvert n=0.013 L=16.0' S=0.0150 '/' Outflow=3.48 cfs 10,522 cf

Pond 785P: DMH H 7+65 Peak Elev=820.17' Inflow=8.57 cfs 25,990 cf
15.0" Round Culvert n=0.013 L=175.0' S=0.0968 '/' Outflow=8.57 cfs 25,990 cf

Pond 786P: H 7+75 L Peak Elev=820.57' Inflow=1.57 cfs 4,669 cf
12.0" Round Culvert n=0.013 L=22.0' S=0.0332 '/' Outflow=1.57 cfs 4,669 cf

Pond 787P: H 7+75R Peak Elev=821.16' Inflow=3.42 cfs 10,512 cf
12.0" Round Culvert n=0.013 L=12.0' S=0.0608 '/' Outflow=3.42 cfs 10,512 cf

Pond 788P: DMH H 9+10 Peak Elev=829.94' Inflow=3.58 cfs 10,809 cf
12.0" Round Culvert n=0.013 L=143.0' S=0.0700 '/' Outflow=3.58 cfs 10,809 cf

Pond 789P: H 9+25 R Peak Elev=830.21' Inflow=1.86 cfs 5,593 cf
12.0" Round Culvert n=0.013 L=14.0' S=0.0429 '/' Outflow=1.86 cfs 5,593 cf

Pond 790P: H 9+25 L Peak Elev=830.21' Inflow=1.72 cfs 5,216 cf
12.0" Round Culvert n=0.013 L=25.0' S=0.0240 '/' Outflow=1.72 cfs 5,216 cf

Pond 795P: LCB A-4 Peak Elev=810.50' Inflow=4.63 cfs 13,629 cf
12.0" Round Culvert n=0.013 L=55.0' S=0.0445 '/' Outflow=4.63 cfs 13,629 cf

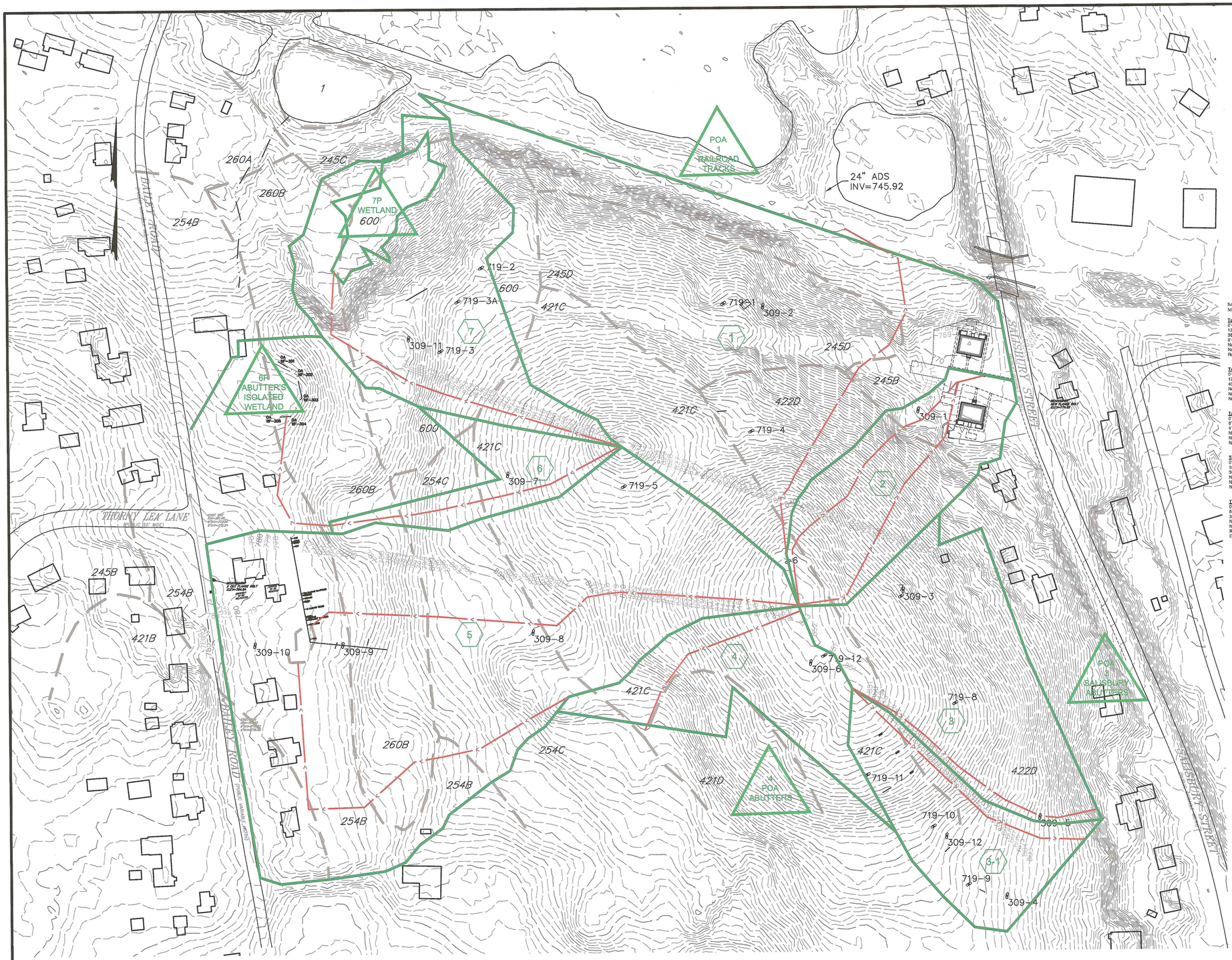
Link 331L: Salisbury Abutters Inflow=4.39 cfs 22,189 cf
Primary=4.39 cfs 22,189 cf

Link POA 1: Railroad Tracks Inflow=10.18 cfs 27,012 cf
Primary=10.18 cfs 27,012 cf

Link POA 3: POA- Salisbury

Inflow=10.66 cfs 47,248 cf
Primary=10.66 cfs 47,248 cf

Pre-Development and Post-Development
Overall Watershed Worksheets (24" x 36")



TABULATION OF SOIL TEST PIT DATA

Analysis for "Pine Tree Woods" Definitive Subdivision - Project No.: 08-364

Test Pit Number	Surface Elevation	Soil Layer Thickness (in) Ap	Bw	C	Total Depth	Depth to: (in) Seep	Water	Water Elevation
309-1	776.8	4	0	116	120	120	120	766.80
309-2	788.5	6	14	100	120	120	120	778.50
309-3	832.9	7	15	98	120	120	120	822.90
309-4	807.1	5	19	96	120	108	120	797.10
309-5	803.3	8	16	108	132	132	132	792.30
309-6	850.3	6	16	104	126	126	126	839.80
309-7	812.1	7	13	100	120	120	120	802.10
309-8	804.9	6	14	108	128	120	128	794.23
309-9	779.5	7	11	78	96	54	54	775.00
309-10	779.2	6	16	84	106	84	92	771.53
309-11	783.7	13	31	58	102	52	52	779.37
309-12	817.3	7	13	112	132	132	132	806.30

TESTING PERFORMED BY DENIS J. MCLAUGHLIN III, WITNESSED BY JAMES ZINGARELLI, P.E.

Soil testing performed on July 25, 2019 from 9:00 am to 5:00 pm on Holden Pine Tree Estates by William Murray, SE 1723 and witnessed by Patrick Wood, P.E., Holden DPW

Test Hole 719-1
0'-12" A: 10YR 3/2; roots 30%; Fine Sandy Loam
12"-36" B: 10YR 4/4; roots <10%; Fine Sand
36"-8' C: 10YR 6/3; roots <5%; Fine-Medium Sand
8'-12' C$_G$: 10YR 5/6; Medium-Coarse Sand; 2% gravel, 5% cobbles, most restrictive
No refusal @ 12'
No water observed
Redox @ 8' high & low chroma, ESHWT=8'

Test Hole 719-2
0'-12' A: 10YR 3/2; roots 40%; Fine Loamy Sand; Loose in place
12'-40' B: 10YR 5/6; roots >20%; Fine Sandy Loam; 5% gravel, 5% cobbles
40'-12' C: 10YR 6/4; roots <5%; Medium-Coarse Sand; 10% gravel, 10% cobbles, 5% stones
No refusal @ 12'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-3
0'-8' A: 10YR 3/2; roots 40%; Fine Loamy Sand; Loose in place
8'-4' B: 10YR 5/8; roots >20%; Fine Sandy Loam; 5% gravel, 5% cobbles
4'-14' C: 10YR 6/3; Medium-Coarse Sand; 5% gravel, 5% cobbles, 5% stones, 10% boulders
No refusal @ 14'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-3A
0'-18" A: 10YR 3/4; roots >30%; Fine Sandy Loam
18"-30" B: 10YR 5/6; roots 10%; Fine Loamy Sand; 5% gravel, 5% cobbles
30'-12' C: 10YR 6/3; Medium-Coarse Sand; 5% gravel, 5% cobbles, 5% stones, 5% boulders
No refusal @ 12'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-4
0'-8" A: 10YR 2/2; roots 20%; Fine Sandy Loam
8'-30" B: 10YR 5/6; roots 10%; Fine Sandy Loam
30'-12' C: 10YR 6/3; Sandy Loam-Loamy Sand; 5% gravel, 5% cobbles, Firm in place
No refusal @ 12'
No water observed
Redox @ 6' high & low chroma, ESHWT=6'
Estimated Perc Rate >10 min/inch

Test Hole 719-5
0'-10' A: 10YR 3/2; roots 20%; Fine Sandy Loam
10'-24' B: 10YR 4/4; Fine Sandy Loam
24'-15' C: 10YR 5/2; Sandy Loam; 5% gravel, 5% cobbles; Firm in place, sub-angular block
No refusal @ 15'
No water observed
Redox @ 10' high chroma, ESHWT=10'
Estimated Perc Rate 20 min/inch

Test Hole 719-6
0'-3" O:
3'-6" A: 7.5YR 3/2; roots >20%; Fine Loamy Sand
6'-36" B: 10YR 6/6; Fine Sandy Loam
36"-16' C: 10YR 5/4; Sandy Loam; 5% gravel, 5% cobbles, Firm in place
No refusal @ 16'
No water observed
Redox @ 6' high & low chroma, ESHWT=6'

Test Hole 719-7
0'-10" A: 10YR 2/2; Fine Sandy Loam
10'-38" B: 7.5YR 6/6; Fine Sandy Loam
38'-14' C: 10YR 5/2; Sandy Loam
No refusal @ 14'
No water observed
Redox @ 5', ESHWT=5'

Test Hole 719-8
0'-10' A: 10YR 2/2; Fine Sandy Loam
10'-32" B: 7.5YR 5/6; Fine Sandy Loam
32'-7' C$_1$: 10YR 5/3; Fine-Medium Sand
7'-14' C$_2$: 2.5Y 5/2; Dense Till; 5% gravel, 5% cobbles; sub-angular block
No refusal @ 14'
No water observed
Redox @ 7', ESHWT=7'

Test Hole 719-9
0'-6" A:
6"-24" B:
24'-6' C$_1$:10YR 5/3; Fine-Medium Sand
6'-8' C$_2$: dense basal till
No refusal @ 8'
No water observed
Redox @ 4' high chroma, ESHWT=4'

Test Hole 719-10
0'-6" A:
6"-24" B: 7.5YR 4/6; Fine Sandy Loam; boulders
24'-10' C: dense basal till, Fine Sandy Loam
No refusal @ 10'
No water observed
Redox @ 5', ESHWT=5'

Test Hole 719-11
0'-6" A:
6"-30" B: 7.5YR 4/6; Fine Sandy Loam
30'-8' C: 10YR 5/2; dense till; 5% gravel, 5% cobbles; sub-angular block
No refusal @ 8'
No water observed
Redox @ 65" high & low chroma, ESHWT=65"

Test Hole 719-12
0'-6" A: Fine Sandy Loam
6"-24" B: 7.5YR 5/6; Fine Sandy Loam
24'-5' C$_1$: 10YR 5/3; Fine-Medium Sand
5'-15' C$_2$: 2.5Y 5/2; dense till; sub-angular block; 5% gravel, 5% cobbles
No refusal @ 15'
No water observed
Redox @ 5' high & low chroma, ESHWT=5'

NCRS SOILS LEGEND

1	WATER
245	HINKLEY SANDY LOAM
254	MERRIMAC FINE SANDY LOAM
260	SUDBURY FINE SANDY LOAM
421	CANTON FINE SAndy loam
422	CANTON FINE SANDY LOAM
600	GRAVEL PITS

(310) SUBCATCHMENT

310 POND

Tc PATH

REVISION NOTE:
1-18-2021 GENERAL REVISION
5-25-2021 GENERAL REVISION
8-11-2021 NO REVISION THIS SHEET

80' 0 80' 160'

BAR SCALE 1"=80'

CHECK GRAPHIC SCALE BEFORE USING

SALISBURY PINE TREE ESTATES PREDEVELOPMENT DRAINAGE AREAS PLAN

LOCATION: Salisbury St., Pine Tree & Bailey Rds
TOWN: HOLDEN, MASSACHUSETTS

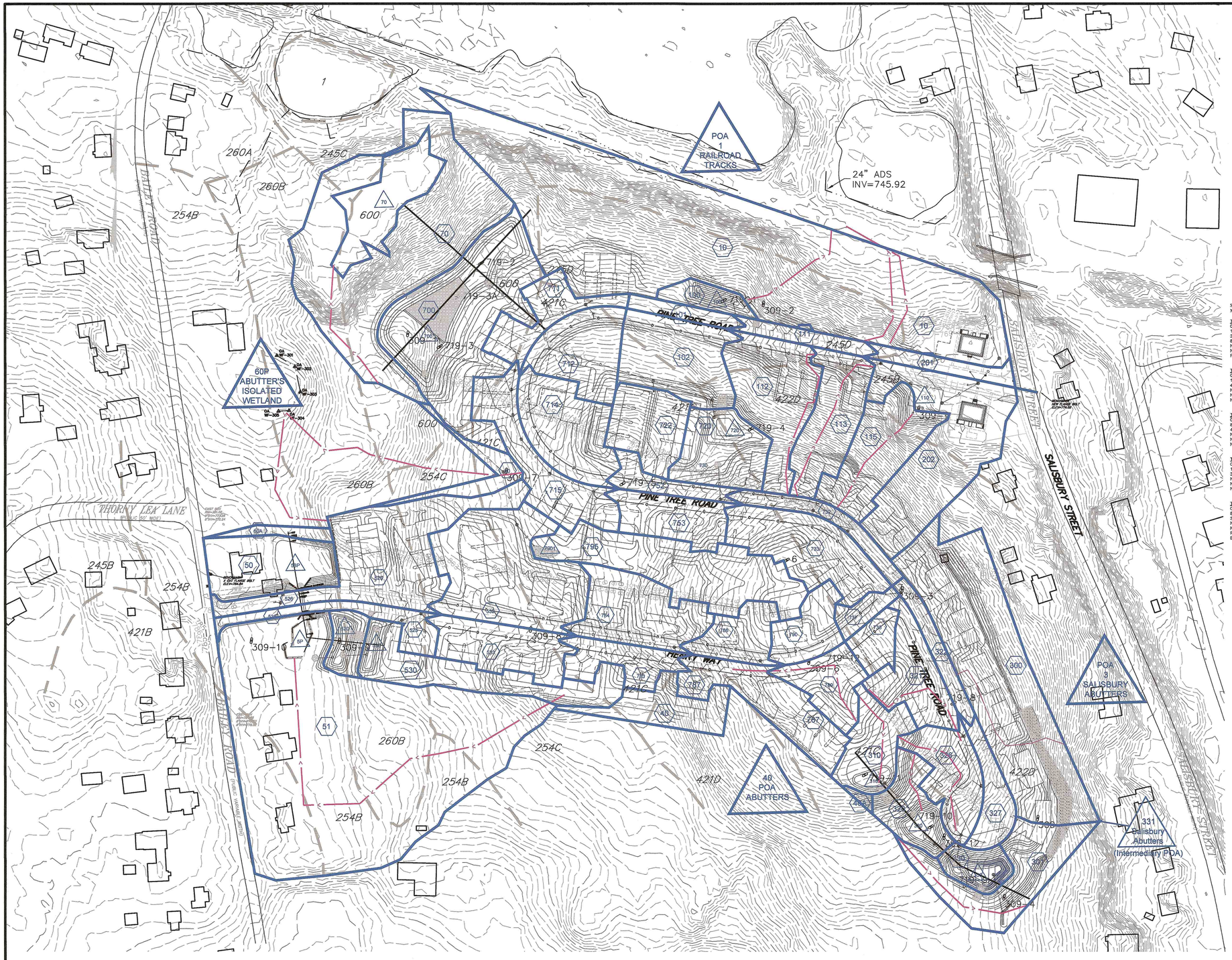
PREPARED FOR:

Holden Pine Tree, LLC

SCALE: 1"=80' DATE: OCT. 2019

PLACES Associates, Inc.
· Planning
· Landscape Architecture
· Civil Engineering
· Surveying
256 Great Road, Suite 4
Littleton, MA 01460
(978) 486-0334
www.placesassociates.com

PROJECT No.: 7602 PRE



NCRS SOILS LEGEND

1	WATER
245	HINKLEY SANDY LOAM
254	MERRIMAC FINE SANDY LOAM
260	SUDBURY FINE SANDY LOAM
421	CANTON FINE SAndy loam
422	CANTON FINE SANDY LOAM
600	GRAVEL PITS

(310) SUBCATCHMENT

(310) POND

Tc PATH

TABULATION OF SOIL TEST PIT DATA

Analysis for "Pine Tree Woods" Definitive Subdivision - Project No.: 08-364

Test Pit Number	Surface Elevation	Soil Layer Thickness (in) Ap	Bw	C	Total Depth	Depth to: (in) Seep	Water	Water Elevation
309-1	776.8	4	0	116	120	120	120	766.80
309-2	788.5	6	14	100	120	120	120	778.50
309-3	832.9	7	15	98	120	120	120	822.90
309-4	807.1	5	19	96	120	108	120	797.10
309-5	803.3	8	16	108	132	132	132	792.30
309-6	850.3	6	16	104	126	126	126	839.80
309-7	812.1	7	13	100	120	120	120	802.10
309-8	804.9	6	14	108	128	120	128	794.23
309-9	779.5	7	11	78	96	54	54	775.00
309-10	779.2	6	16	84	106	84	92	771.53
309-11	783.7	13	31	58	102	52	52	779.37
309-12	817.3	7	13	112	132	132	132	806.30

TESTING PERFORMED BY DENIS J. MCLAUGHLIN III, WITNESSED BY JAMES ZINGARELLI, P.E.

Soil testing performed on July 25, 2019 from 9:00 am to 5:00 pm on Holden Pine Tree Estates by William Mussay, SE 1723 and witnessed by Patrick Wood, P.E., Holden DPW

Test Hole 719-1
0'-12" A: 10YR 3/2; roots 30%; Fine Sandy Loam
12"-36" B: 10YR 4/4; roots <10%; Fine Sand
36"-8' C: 10YR 6/2; roots <5%; Fine-Medium Sand
8'-12' C_2: 10YR 5/6; Medium-Coarse Sand; 2% gravel, 5% cobbles, most restrictive
No refusal @ 12'
No water observed
Redox @ 6' high & low chroma, ESHWT=6'

Test Hole 719-2
0'-12" A: 10YR 3/2; roots 40%; Fine Loamy Sand; Loose in place
12"-40" B: 10YR 5/8; roots >20%; Fine Sandy Loam; 5% gravel, 5% cobbles
40'-12' C: 10YR 6/4; roots <5%; Medium-Coarse Sand; 10% gravel, 10% cobbles, 5% stones
No refusal @ 12'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-3
0'-8' A: 10YR 3/2; roots 40%; Fine Loamy Sand; Loose in place
8'-4' B: 10YR 5/8; roots >20%; Fine Sandy Loam; 5% gravel, 5% cobbles
4'-14' C: 10YR 6/3; Medium-Coarse Sand; 5% gravel, 5% cobbles, 5% stones, 10% boulders
No refusal @ 14'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-5A
0'-18" A: 10YR 3/4; roots >30%; Fine Sandy Loam
18"-30" B: 10YR 5/6; roots 10%; Fine Loamy Sand; 5% gravel, 5% cobbles
30"-12' C: 10YR 6/3; Medium-Coarse Sand; 5% gravel, 5% cobbles, 5% stones, 5% boulders
No refusal @ 12'
No water observed
No Redox observed – boney sand and gravel

Test Hole 719-4
0'-8" A: 10YR 2/2; roots 20%; Fine Sandy Loam
8"-30" B: 10YR 5/6; roots 10%; Fine Sandy Loam
30'-12' C: 10YR 6/3; Sandy Loam-Loamy Sand; 5% gravel, 5% cobbles, Firm in place
No refusal @ 12'
No water observed
Redox @ 6' high & low chroma, ESHWT=6'
Estimated Perc Rate >10 min/inch

Test Hole 719-10
0'-6" A:
6"-24" B: 7.5YR 4/6; Fine Sandy Loam; boulders
24'-10' C: dense basal till, Fine Sandy Loam
No refusal @ 10'
No water observed
Redox @ 5', ESHWT=5'

Test Hole 719-11
0'-6" A:
6"-30" B: 7.5YR 4/6; Fine Sandy Loam
30"-8' C: 10YR 5/2; dense till; 5% gravel, 5% cobbles; sub-angular block
No refusal @ 8'
No water observed
Redox @ 65" high & low chroma, ESHWT=65"

Test Hole 719-12
0'-6" A: Fine Sandy Loam
6'-24" B: 7.5YR 5/6; Fine Sandy Loam
24'-5' C_1: 10YR 5/3; Fine-Medium Sand
5'-15' C_2: 2.5Y 5/2; dense till; sub-angular block; 5% gravel, 5% cobbles
No refusal @ 15'
No water observed
Redox @ 5' high & low chroma, ESHWT=5'

Test Hole 719-5
0'-10" A: 10YR 2/2; roots 20%; Fine Sandy Loam
10"-24" B: 10YR 6/4; Fine Sandy Loam
24"-15' C: 10YR 5/2; Sandy Loam; 5% gravel, 5% cobbles; Firm in place, sub-angular block
No refusal @ 15'
No water observed
Redox @ 10' high chroma, ESHWT=10'
Estimated Perc Rate 20 min/inch

Test Hole 719-6
0'-3" O:
3"-6" A: 7.5YR 3/3; roots >20%; Fine Loamy Sand
6"-30" B: 10YR 5/6; Fine Sandy Loam
30"-16' C: 10YR 5/4; Sandy Loam; 5% gravel, 5% cobbles, Firm in place
No refusal @ 16'
No water observed
Redox @ 6' high & low chroma, ESHWT=6'

Test Hole 719-7
0'-10" A: 10YR 2/2; Fine Sandy Loam
10'-36" B: 7.5YR 5/6; Fine Sandy Loam
36'-14' C: 10YR 5/2; Sandy Loam
No refusal @ 14'
No water observed
Redox @ 3', ESHWT=5'

Test Hole 719-8
0'-10" A: 10YR 2/2; Fine Sandy Loam
10'-32" B: 7.5YR 5/6; Fine Sandy Loam
32'-7' C_1: 10YR 5/3; Fine-Medium Sand
7'-14' C_2: 2.5Y 5/2; Dense Till; 5% gravel, 5% cobbles; sub-angular block
No refusal @ 14'
No water observed
Redox @ 7', ESHWT=7'

Test Hole 719-9
0'-6" A:
6"-24" B:
24'-6' C_1:10YR 5/3; Fine-Medium Sand
6'-8' C_2: dense basal till
No refusal @ 8'
No water observed
Redox @ 4' high chroma, ESHWT=4'

REVISION NOTE:
1–18–2021 GENERAL REVISION
5–25–2021 GENERAL REVISION
8–11–2021 NO REVISIONS THIS SHEET

80' 0 80' 160'

BAR SCALE 1"=80'

CHECK GRAPHIC SCALE BEFORE USING

SALISBURY PINE TREE ESTATES POST DEVELOPMENT DRAINAGE AREAS PLAN

LOCATION: Salisbury St., Pine Tree & Bailey Rds
TOWN: HOLDEN, MASSACHUSETTS

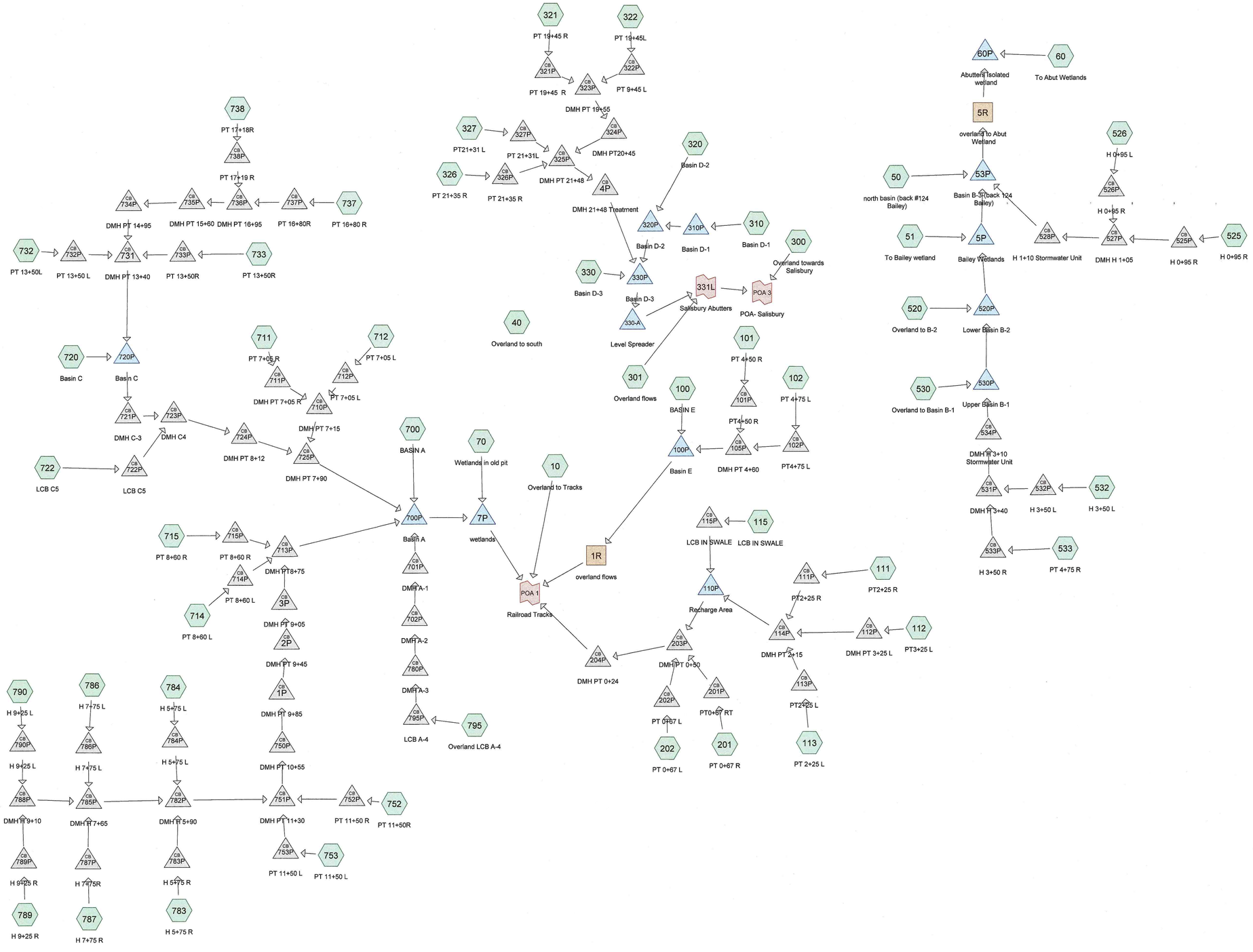
PREPARED FOR:

Holden Pine Tree, LLC

SCALE: 1"=80' DATE: OCT. 2019

PLACES Associates, Inc.
·Planning
·Landscape Architecture
·Civil Engineering
·Surveying
256 Great Road, Suite 4
Littleton, MA 01460
(978) 486-0334
www.placesassociates.com

PROJECT No.: 7602 POST



Routing Diagram for Pine Tree Post- REV 2021(2)

Prepared by Places Associates, Inc., Printed 8/14/2021